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Affects of extracurricular activities on youth in the ASD population

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AFFECTS OF EXTRACURRICULAR ACTIVITIES ON YOUTH IN THE ASD POPULATION

by

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Dedication

I would like to dedicate this to my niece; a small but fierce individual who is a constant light in my life.

Acknowledgment

I would like to express my appreciation to all of my professors, past and present. I am forever grateful for the inspiration.

I would also like to thank my sister. Her encouragement and support is endless. I could not be more grateful to have such a beautiful person in my life.

Abstract

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Individuals with Autism Spectrum Disorder (ASD) lack the understanding of appropriate communication and social skills. Considerable research has proven that extracurricular activities boost numerous positive effects academically, emotionally, and behaviorally. Given that participating in extracurricular activities provide such outstanding benefits to overall quality of life, it is important to understand the opportunities presented to youth with ASD. Research suggests that poorer school distrits who suffer budget cuts have been forced to reduce funding for extracurricular activities. Furthermore, more affluent school districts are able to seek extracurricular activities through private resources, in addition to their already plentiful selection of programs. This discrepancy puts youth of low-income families at a greater disadvantage.

This study investigated the relationship between the average income of Hunterdon County, Gloucester County, and Cumberland County of New Jersey with the number of extracurricular activities offered to youth with ASD. These counties hold the highest, middle, and lowest average income rates of New Jersey, respectively. The Directors of Special Services of each school district within the three counties (n=64) were contacted in order to collect data regarding program opportunities. Data from the United States Census Bureau was examined to obtain the average income of Hunterdon, Gloucester, and Cumberland Counties.

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Chapter 1

Introduction

The purpose of this study was to analyze the opportunities to participate in extracurricular activities presented to youth with Autism Spectrum Disorder (ASD) throughout the state of New Jersey (NJ). There is evidence that participating in extracurricular activities promotes higher social skills (Cadwallader, Wagner, & Garza, 2003; Cadwallader & Wagner, 2003). These studies analyzed the participation of youth with ASD with other developmental disabilities. The current research sought to acknowledge the affect of participating in extracurricular activities of youth with ASD. Moreover, the research sought to find the most common extracurricular activities within three specific counties of New Jersey, as well as the social skills benefits of these specific activities. These counties include: Hunterdon County, Gloucester County, and Cumberland County. Hunterdon County holds the highest average income when compared to the remaining twenty counties in New Jersey. Gloucester County falls at the median average income. Cumberland County has been designated as having the lowest average income.

Hypothesis

It was hypothesized that the more affluent the county in NJ is, the more resources will be offered to youth with ASD. More specifically, the higher rate of county median income will provide greater opportunity for youth to participate in extracurricular activities. Participation in these activities would lead to more success in managing themselves in social situations.

Limitations

The study was limited to voluntary participation on the part of the directors and supervisors. With a low number of responses, the knowledge of extracurricular activities is limited. The findings of this research are also limited because it only examined three of the twenty counties in New Jersey. Therefore, the results cannot be generalized to the entire state.

Assumptions

For the current study, it was assumed that participants will respond truthfully to collect accurate data; the data collected from online resources would be readily available, up to date, and specific; extracurricular activities would be established in each county; and a higher county median income would indicate more extracurricular programs and resources.

Definitions

Social skills: skills that allow a person to interact and act appropriately in given social contexts

Extracurricular activities: structured activities that students participate in that do not fall into the realm of normal curriculum of schools (Massoni, 2011)

Integrated programs: a type of extracurricular activity opened to all interested youth; for youth that require extra support, accommodations are made

Non-integrated programs: a type of extracurricular activity that meets the specific needs of youth with ASD

Chapter 2

Literature Review

Autism Spectrum Disorder Defined

Tilton (2004) defines Autism Spectrum Disorder (ASD) as a broad classification of disorders in which there are several similar impairments. Conditions of ASD are unique to each individual case and characteristics vary widely, as explained on a 'spectrum'. The DSM-V was published in 2013 with a number of changes. Autism Spectrum Disorder encompasses: Autistic Disorder, Asperger's Disorder, Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS) and Childhood Disintegrative Disorder (Anagnostou et al., 2014). For the purpose of the study, Autistic Disorder will be studied further. Melillo (2009) defines autism as an extreme inability to communicate normally and develop social relationships often accompanied by behavioral challenges. It is a complex developmental disorder involving delays in and problems with social interaction, language and a range of emotional, cognitive, motor, and sensory abilities (Greenspan & Wieder, 2006). More than 80% of children show signs of ASD by the age of two (Anagnostou et al., 2014). Diagnosis, however, does not typically occur until the child is about four years-old (Anagnostou et al., 2014). The prevalence of Autism Spectrum Disorder is one in 68 children, with a four and a half times higher rate among boys than girls (Christensen et al., 2016). According to a report released by the Centers for Disease Control and Prevention (CDC), New Jersey has the highest prevalence of youth with ASD, at a rate of one in 41 (Autism New Jersey, 2016).

Characteristics of ASD

The most prominent issue for an individual with autism is their lack of understanding social cues. Sarnoff-Ross (2011) explains that a typically developing child will learn to "read" people by observing their surrounding world. Social cues are perceived from others without needing to be directly told. These cues are often missed by individuals with ASD. As noted by Foden and Anderson (2011), the external signs characterize the social impairment of ASD. These include: poor eye contact; a lack of interest in initiating social interactions; a lack of understanding of emotions and how they are expressed; and a literal interpretation of non-literal language, such as figures of speech, metaphors, and sarcasm. Children with autism often need to be taught the simple interpersonal actions and expectations that most typical children pick up from observation (LeComer, 2009). For example, they do not engage in typical play activities like pretend play, and they use toys differently from typical children (Exkorn, 2005). A child with ASD tends to lack empathy (National Autism Center, 2011). Ozonoff, Dawson, and McPartland, (2002), pinpoint the inability of those diagnosed with an ASD to have trouble with reciprocity. This is noted as the back-and-forth interactions that make up all social encounters.

Individuals with ASD also engage in abnormal behavior, more specifically what is known as self-stimulating behavior. This tends to be the most obvious symptom (National Autism Center, 2011). It can involve fixating on an object, staring blankly; repetitive body movements, such as rocking back and forth or hand-clapping; or the repetitive movement of objects, such as turning on and off a light switch (Exkorn, 2005).

Unfortunately, these different tendencies isolate autistic children from their

typical peers. A hallmark characteristic of ASD is restricted interests and activities (Coyne, 2014). This often includes extreme interests with specific topics, objects, or activities. They may have advanced memory skills (National Autism Center, 2011). Coyne (2014) contests that without assistance to develop new interests or activities, individuals with ASD will likely continue to be limited. Along with a restricted range of activities, these individuals require consistency in their environment and daily routine (Autism Speaks, 2016). More often than not, changes can lead to induced stress and outbursts.

In addition, it can be difficult to integrate youth with ASD in activities due to their high sensitivity to their surroundings. Robinson (2011) explains that because of the unusual interpretations through their sensory systems, children with ASD can experience the world as a very painful and anxiety-provoking place. Others may be under-responsive to sensory input (Autism Speaks, 2016). An example would be their failure to respond to their name being called. This further isolates them from necessary and desired social interaction.

Their inability to connect with others emotionally and engage in age-appropriate behavior, results in a shortfall of relationships. Sicile-Kira (2008) acknowledges that because individuals on the spectrum have difficulties with all that is social, they tend not to have problems with the notion of being alone. On the surface, children with ASD may seem to hold little interest in social interaction. LeComer (2009) concurs that when given opportunities to interact, autistic children often choose to remain alone while typical children naturally move to join in and engage with each other socially. However, according to Foden and Anderson (2011), many children and adolescents on the spectrum

long for social acceptance and social interaction with others. Communication difficulties range from being nonverbal and having practically no system of communication, to someone who speaks with ease who may just miss the subtleties of body language (Sicile-Kira, 2008). The boundary that keeps them from forming successful relationships is their inability to recognize socially acceptable behavior. Their atypical body language, facial expressions, and tone of voice all contribute to a lack of social interaction and miscommunications (Autism Speaks, 2016)

Benefits of Extracurricular Activities

Massoni (2011) explains that extracurricular activities are activities that students participate in that do not fall into the realm of normal curriculum in school. They boost numerous positive effects academically, emotionally, and behaviorally. They vary between sports teams, performing clubs (e.g., drama, art, music), special interests, and other social events. These activities provide the opportunity to learn new skills, improve talents and self-esteem, and develop relationships with peers (Stoloff, 2009). An important aspect is that these activities are fun and voluntary, and offered in individual or group settings. Youth have the choice of participating; a choice in which activity suits them best. For the purpose of this study, the benefits of extracurricular activities on social skills will be discussed further.

Participating in group activities builds social skills. Coyne (2014) emphasizes the importance of recreational activities as the primary means by which people come into contact with one another and form relationships. Learning how to cooperate with one another, respect others, comply with rules and expectations, practicing appropriate behaviors, are just a few of the lessons learned. Social skills are crucial to success in the

classroom, the community, and they are essential to friendships (Folden & Anderson, 2011). According to Cadwallader et al. (2003), higher social skills were reported for youth who participate in extracurricular activities.

Youth with ASD often enjoy the same activities as others, given appropriate opportunity and structure (Coyne, 2014). Aside from the obvious benefits of participating in social activities, is the factor of increased awareness in differences among peers of all populations. Increased participation in community activities will help people with and without ASD to develop skills and attitudes needed to live cooperatively (Coyne, 2014). Blending the community will teach youth to be more sensitive and understanding to diversity. Stoloff (2009) believes that "'non-disabled' students will look past one's 'disability' and focus more on one's talents and skills." When typical children are denied exposure to children with differences, they lose the opportunity to learn important life lessons (Stolman, 2015). Extracurricular activities are a primary source for increasing social skills.

Integrating Youth with ASD into the General Population

Autism is a "lifelong developmental disability that affects how a person communicates with and relates to other people, and how they experience the world around them" (The National Autistic Society, 2014). Two federal laws prohibit the discrimination of individuals with disabilities. Section 504 of the Rehabilitation Act legally obligates school districts to provide students with disabilities equal opportunity to participate in extracurricular activities (U.S. Department of Education, 2013). It is required that modifications are made, and aids and services are provided (Galanter, 2013). Title II of the Americans with Disabilities Act does not allow public entities to

"discriminate on the basis of disability in providing their services, programs, and activities (U.S. Department of Education, Office of Special Education and Rehabilitative Services, Office of Special Education Programs, 2011). Integrating youth with ASD in activities among the general population can create positive, successful experiences if it is overseen carefully. Robinson (2011) notes that scout groups (i.e. Boy Scouts, Girl Scouts) are highly beneficial because they provide youth with a mentor. This interaction demands patience, cooperation, and respect. Programs alike are experiential learning and offer benefits to all members (Robinson, 2011). Other studies support the notion that social skill groups which involve, both peer models and the atypical child, result in improved social connections and friendships (Humphrey & Hebron, 2014). Locke, Fuller, and Kasari (2012) examined the social impact of pairing a typical peer with a child with autism as a social skills intervention. They reported the typical peers were "more socially adept". Their research disputes the perception that this interaction results in destructive social outcomes. It is crucial that appropriate supports are available. It will ensure the highest potential of success. Peer can be essential models for learning and behavior (McPartland and Volkmar, 2012). However, specialists and professionals are needed as well.

While integrating youth with ASD in activities that are tailored for the general population may seem beneficial, research has proven that it also poses negative outcomes. Youth on the spectrum are at risk of experiencing more instances of bullying than youth with dyslexia or those with no identified difficulties (Humphrey & Hebron, 2014). Peers do not see the disability because Autism Spectrum Disorder does not have physical deformations. Therefore, it becomes difficult for them to understand and

empathize with behavioral differences. Social connections are not automatic and natural because of this misunderstanding (Leiter, 2011). Moorewood, Humphrey, and Symes (2011) explains that the typical child may have a difficult time accepting a youth with ASD because they receive extra attention, can be a distraction and disruptive, be nervous or frightened by them, and therefore, may tease and ignore.

There are a number of social skills training techniques and activities that can be implemented into afterschool programming. Social skills' training is a common treatment method (Laugeson, Ellingsen, Sanderson, Tucci, & Bates, 2014). Such activities are specific to improving the overall lifestyle of youth with ASD. Like it goes for any child, positive self-image is built from focusing on strengths they have. Youth with ASD also have a wide range of talents. The National Autism Center (2011) uses the example of a youth who excels at playing piano but lacks the ability to interact with peers. By creating a game to encourage turn-taking, the child will slowly begin to understand how to strengthen their communication skills. Techniques, like the one aforementioned, hold validity for building adaptive behavior and other social skills in youth with ASD. Other techniques include: social stories/comic strip conversations, hidden curriculum, social scripts, computers and technology, and social skills groups (Foden & Anderson, 2011). As explained by Robinson (2011), social skills programs focus on teaching essential skills to increase a child's self-confidence in social situations. However, these techniques have their limitations in that the intensity was found to be too low. Most social skills training programs are implemented during the school day. This is not ample time for youth with ASD to comprehend appropriate reactions during different social situations. For youth with ASD, practicing social skills is continuous. To be most effective, they

should be taught in different settings in order to understand its extensive use. Many youth long for friendships but lack the skills to appropriately form and maintain them. Providing these youth with activities that are structured to their specific needs is crucial to achieving success in all social situations. This is why it is important to continue teaching these skills outside of the school, in after-school programs or clubs. There is a lack of programs that addresses this need, as evidenced in the current study.

Rates of Participation of Youth with ASD

Coyne (2014) explains the "characteristics of ASD, such as restricted interests, difficulties in social interaction, and unusual responses to sensory input, often limit opportunities for these individuals to access school and community recreation activities." According to Sicile-Kira (2008), for individuals on the spectrum, activities are purpose-driven or interest-driven. This means, there is not an understanding of why someone would do something out of pure joy. Youth with ASD tend to do well in situations that are organized around a specific activity (Maygar, 2014).

The National Longitudinal Transition Study-2 (NLTS2) reported that of a nationally represented population of school-aged youth with disabilities, only 46% participated in extracurricular activities within the past year (Newman, 2005). Cadwallader et al. (2003) analyzed reports by parents of youth with disabilities regarding whether youth have taken lessons or classes outside of school, participated in organized groups at school or in the community, or did some form of community service within the past year. According to this research, sports teams are the most common group that youth with disabilities participate in. Community-sponsored activities (e.g., religious youth groups, Boys/Girl Scouts) are the second most common, followed by performing groups

and special interests groups, respectively. Contrary to this finding, Cadwallader et al. (2003) explains that youth with autism are the least likely, out of the disabilities they studied (i.e., hearing impairments, speech and language impairments, other health impairments), to participate in extracurricular activities.

Cadwallader and Wagner (2003) surveyed parents of youth with disabilities to assess the effects of participating in extracurricular activities on the level of social skills. This study found that youth with autism received "lower ratings from their parents for overall social skills and congregate on the low side of the self-control and cooperation scales" (Cadwallader and Wagner, 2003). Furthermore, this group was the least likely to be involved in extracurricular activities.

Shattuck, Orsmond, Wagner, and Cooper (2011) also conducted a similar study comparing the prevalence of social activities between adolescents with ASD to other special education categories. Overall, this research corresponds with Cadwallader et al. (2003), who found youth who participate in extracurricular activities have more active friendships. Shattuck et al. (2011) concluded that adolescents with ASD have fewer interactions with friends and lower rates of social participation. Additionally, poor social skills were associated with a lower likelihood of social participation.

Many studies have indicated that their poor social skills resulted in lower rates of social participation (Shattuck et al., 2011). This study specifically argued that of adolescents with an ASD, half experience no or very limited social activities with friends and only one-third participate in social activities in the community. Their findings affirm that social deficits are a core challenge that is closely associated with a wide range of social participation outcomes.

Their lack of understanding social cues suppresses their desire for being included. Wagner (2003) notes that limitations in social skills may pose challenges in interacting with friends and in social situations, but do not prevent them from doing so. A low rate of participation is a possible result of the tendency for independent play and a lack in communication and cognitive abilities. LeComer (2009) argues, with every new social experience, youth will better understand how to cope and function within different social situations independently. The more social interaction becomes valued, the more eye gaze, joint attention, and other fundamental social skills are nurtured, encouraged, and built upon, the more successful an individual with ASD will become in their social world (Foden & Anderson, 2011).

Income Affect on Programs Offered

Previous research examined the participation rates of youth, based on family income. According to their findings, rates of participation are increasing among youth in more affluent families (Moore, Murphey, Bandy, & Cooper, 2014; Cadwallader et al. , 2003; Shattuck et al., 2011). With a larger income, families are able to afford activities or provide their children with more resources. Moreover, low-income families tend to have limited access to information and professional supports (National Autism Center, 2011). Leiter (2011) highlights that youth with disabilities from higher-income families had more friendship interactions and participated in more extracurricular activities than youth from lower-income families. Cadwallader et al. (2003) suggest these "findings…may be financial barriers to access or entry into these activities for lower-income youth". Wagner (2003) specifies that youth with disabilities from lower-income families are "less likely to participate in extracurricular activities of every kind". Moreover, their rate of interactions

with friends and among social activities is little to none. Transportation to and from activities becomes a barrier as well (National Autism Center, 2011). The National Longitudinal Transition Study-2 (NLTS2) "provides the first national picture of the involvement of families in the educational development…of children with disabilities" (Newman, 2005). For the purpose of the current study, the affect of school involvement based on household income was examined. According to the NLTS2, wealthier families are linked to higher involvement in the youth's education. The opportunity to obtain more or better resources is a direct result of higher income. From the empirical research, it is evident that household income (socioeconomic status) influences social participation considerably. School-based extracurricular activities should be implemented to evade these shortcomings of low-income families.

With the current study, emphasis was placed on the influence of county median income on the extracurricular programs offered to youth with Autism Spectrum Disorder. Extracurricular activities may not be an option because of economic restraints; therefore, it would be highly beneficial for individual school districts to provide the opportunity for non-fee based programs.

Chapter 3

Methods

By contacting the Director of Special Services of each district in Hunterdon County, Gloucester County, and Cumberland County, the research will explain the differences in resources provided to youth with ASD. Further research will examine the factor of county median income. The researcher will look to explain the influences of median income on the number of extracurricular programs offered to youth with ASD.

Subjects

The Directors and Supervisors of Special Services from Hunterdon County, Gloucester County, and Cumberland County were contacted via e-mail. A total of 64 directors and supervisors were contacted.

The demographic data used for the current study was collected from government sponsored websites.

Procedures

In order to assess the activities and programs offered within each county of New Jersey, the Director of Special Education was contacted via e-mail. A consent to participate waiver was sent to each participant, with a brief questionnaire attached (See Appendix B, page 27). Each participant was asked: if their district offers extracurricular activities/programs (community- or school-based) for youth with ASD; if so, what activities/programs, specifically, are offered; and, is a fee required to participate. See Appendix A for further explanation of the information requested.

Demographic information was obtained from government sponsored websites. These websites hold true to their validity and reliability. The United States Census

Bureau website was reviewed to analyze the county median income. The State of New Jersey Department of Education website was analyzed to gather the following information: the population of youth with ASD within each county, the specific districts within each county, the Directors and Supervisors of Special Services contact information, and the average county budget spent on extracurricular activities.

Chapter Four

Results

It was hypothesized that the more affluent the county in NJ is, the more resources will be offered to youth with ASD. According to the United State Census Bureau, Hunterdon County has a median income of $106,519; Gloucester County has a median income of $76,213.00; Cumberland County has a median income of $50,603.00.

The State of New Jersey Department of Education provided the current study with the population of youth with ASD within each county; the district names in each county; the Directors and Supervisors of Special Services e-mail information; the average budget costs spent during the 2015-2016 school year on extracurricular activities for each district (these numbers were then condensed to represent a 'county' budget.

Hunterdon County has a population of 225 youth with ASD (NJDOE). The total number of school districts in Hunterdon County is 27 (NJDOE). The average budget costs Hunterdon County spent during the 2015-2016 school year on extracurricular activities was $317.81 (NJDOE).

Gloucester County has a population of 584 youth with ASD (NJDOE). The total number of school districts in Gloucester County is 29 (NJDOE). The average budget costs Gloucester County spent during the 2015-2016 school year on extracurricular activities was $232.14 (NJDOE).

Cumberland County has a population of 271 youth with ASD (NJDOE). The total number of school districts in Cumberland County is 19 (NJDOE). The average budget costs Cumberland County spent during the 2015-2016 school year on extracurricular activities was $105.22.

Directors of Special Services were contacted via e-mail. A total of 64 Directors were contacted. Each was asked if the district they service offers extracurricular activities/programs (community- or school-based). If answered 'Yes', participants were then asked to describe the specific activities/programs and if a fee is required to participate. Data collected from the Directors of Special Services was very low. Of the 64 contacted, 7 responded. Of the 7 responses, 1 chose not to participate, and 1 expressed there was no youth with ASD within that district. Among the 27 districts in Hunterdon County, the research collected only 3 responses from Directors. Of the 29 districts in Gloucester County, the research collected only 3 responses from Directors. Lastly, research collected from Cumberland County, which includes 19 districts, only 1 response was received. Out of the 7 responses, 5 responded 'Yes'; signifying they indeed provided opportunities to participate in extracurricular programs. These 5 responses were further broken down into two categories: integrated programs and non-integrated programs. There were 4 responses that specified the district offers integrated programs, while only 1 district offers non-integrated programs. A general response to describe integrated programs was:

"The district offers students with ASD the chance to participate in any of our after school clubs, or athletic teams. We do not have an extracurricular group focused solely for students with ASD. Students with ASD participate in the club/team of their choice either individually, with a peer mentor, or with the supervision of a paraprofessional."

The non-integrated program is "social skills training".

All 5 responses explained there is no fee required to participate in the extracurricular activities offered.

Overall, there was not enough empirical data to imply a significant effect of median income on the number of programs offered. This is due to an extremely low response rate (see Table 1).

Table 1

Demographics and Response Rate

County	**Median Income**	**Avg. $ Spent on E.A.s (per student)**	**# of School Districts**	**# of Responses/ # Contacted**	**ASD Pop'n**	**I.P.s**	**N.I.P.s**	**Not Particip.**	**No Youth with ASD**
Hunterdon	$106,519	$317.81	27	3/27	225	1	1	-	1
Gloucester	$76,213	$232.14	29	3/24	584	2	-	1	-
Cumberland	$50,603	$105.22	19	1/13	271	1	-	-	-

Integrated programs (I.P.): programs open to all populations of youth; districts provide supports to accommodate youth with ASD

Non-integrated programs (N.I.P.): programs specific to youth with ASD (i.e. social skills training)

Not participating: district Director/Supervisor chose not to participate in the study

Chapter 5

Discussion

Autism Spectrum Disorders (ASDs) are a group of neurodevelopmental disorders characterized by impairments in social interactions and communication, as well as repetitive behaviors and restricted interests" (Maenner et al., 2014).

The ultimate goal of this study was to explore the influence of county median income on the number of extracurricular programs offered to youth with ASD. According to Pew Research Center (2015), lower-income families report having less availability of after-school programs than higher-income families. Reasons being, parents find it difficult to access high-quality, affordable programs. Given the numerous social benefits of participating in extracurricular activities, it was assumed there would be a plethora of activities to choose from within each county.

The results did not support this hypothesis. There seems to be a reluctance to respond to the questionnaire. The results reflect a possible lack of programs offered to youth with ASD, specifically, or the lack of knowledge and training regarding ASD and the necessary supports. Of the 3 responses collected from Gloucester County directors, 1 chose not to participate in the study. This district, which shall remain anonymous, has 12 students with ASD (NJDOE). Gloucester County has a population of 584 youth with ASD (NJDOE); the highest among the three counties examined in the current study. It can only be assumed that this particular school district does not want to expose their deficit program opportunities.

The majority of responses indicated that their district provides youth with the option to participate in extracurricular activities within the general population. Youth are

provided with appropriate supports (i.e. 1:1 individual support, peer buddies). The benefits of integrating youth with ASD among their typical peers has proven beneficial (Robinson, 2011; Humphrey and Hebron, 2014; McPartland and Volkmar, 2012). Koegel, Vernon, Koegel, Koegel, and Paullin (2012) note that both the child with ASD and the typical peer take away positive and better understandings of how to interact with one another. Specifically, the child with ASD learns how to "share, imitate, ask for help, greet, and respond to conversation while playing with toys, while also teaching the typical peers about disabilities and basic behavior management procedures…" (Koegel et al., 2012). Previous research has shown that youth with ASD are susceptible to experiencing social exclusion. Integrated programs will alleviate social exclusion. In sum, youth with ASD learn how to communicate and interact with their peers through modeling. The results showed 57% of programs were integrated programs. This is not surprising given it is highly beneficial.

On the contrary, with the positive outcomes of integrating, there are many circumstances where youth with ASD are bullied. It is often due to misunderstanding because autism is such a complex disorder (Moorewood et al., 2011).

Only 1 district explained they offered non-integrated extracurricular programs to youth with ASD. Social skills training and groups are beneficial because it fosters future success for integrating with other youth. By strengthening communication skills, youth are better able to learn, maintain friendships, initiate interactions, and experience empathy (Weiss and Riosa, 2015). Non-integrative intervention strategies may include: priming, self-management, script-fading, and organizing social activities that center around the interest of the youth (Koegel, Matos-Fredeen, Lang, and Koegel, 2011).

The populations of youth with ASD should have been indicative of the amount of programs offered in each county. Cumberland County has the second highest population, but the lowest response rate. Cumberland County has the lowest median county income of New Jersey. Therefore, with such a low response, it is possible that there simply are not activities and programs suited to the ASD population.

The current study supports idea that access to activities for youth with ASD, may be one of the best measures for social acceptance and inclusion. Stoloff (2009) emphasizes the importance of students with disabilities participating in extracurricular activities. The opportunities presented to participating in a variety of structured activity provides youth with a range of competencies. It also builds interests, which leads to hobbies and intrinsic motivation to be a part of something. Moreover, participation builds relationships and ultimately leads to exposure to different experiences and people.

Further research should produce a more reliable survey. The language of the survey in the current study may have deterred participants. It would also be beneficial to focus on smaller populations; possibly one county at a time to better understand the income affect on the number of resources.

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Appendix A

Cover Letter

Dear _____,

My name is Kristina Munyon. I am currently enrolled in the Master's of School Psychology program at Rowan University in Glassboro, NJ. I am in the process of writing my Master's thesis. I am exploring the needs of youth with Autism Spectrum Disorder (ASD), with an emphasis on bettering social skills. The objective of this study is to determine the different extracurricular activities offered to youth with ASD. The research will also highlight the most common activities and why they are considered beneficial. Prior research supports the notion that participating in extracurricular activities has a tremendous positive influence on social skills. The current study seeks to explain the importance of using extracurricular activities as an intervention. The is entitled, "Affects of Extracurricular Activities on Youth in the ASD Population".

I am focusing my research on three specific counties in the state of New Jersey. I am contacting the Directors and Supervisors of Special Services in all districts of Hunterdon County, Gloucester County, and Cumberland County in order to gather information. I hope to recruit your assistance by asking a few questions.

The results of all districts will remain absolutely confidential and anonymous. The data collected will be aggregate of the state of New Jersey.

Your approval to provide input is crucial and valuable to my research. If you have any other questions or concerns, please feel free to contact me at my e-mail address: munyonk2@students.rowan.edu. I truly appreciate the time taken to answer my questions. I look forward to hearing from you.

Please refer to the attached document for a consent to participate form and the questionnaire for this survey. Thank you.

Sincerely,

Kristina Munyon, B.S.
Master's of School Psychology Program
Rowan University
Glassboro, NJ 08028
munyonk2@students.rowan.edu

Appendix B

Consent to Participate and Survey

You are invited to participate in an online research survey entitled "Affects of Extracurricular Activities on Youth in the ASD Population". You are included in this survey because the research seeks to explain the influence of average income on the amount of programs provided for youth with Autism Spectrum Disorder (ASD). The participants to be enrolled in the study will be the Directors and Supervisors of Special Services in all school districts within Hunterdon County, Gloucester County, and Cumberland County of New Jersey.

The survey may take only a few minutes of your time to complete. Your participation is voluntary. Completing this survey indicates that you are voluntarily giving consent to participate in the brief questionnaire. I hope to collect all data for this survey within six weeks.

The purpose of this study is to analyze the opportunities presented to youth with ASD throughout three specific New Jersey counties. These counties include: Hunterdon, Gloucester, and Cumberland. Hunterdon County holds the highest average income when compared to the remaining twenty counties in New Jersey. Gloucester County falls at the median average income. Cumberland County has been designated as having the lowest average income. By contacting the Director and Supervisors of Special Services of each county, the research will explain the difference between districts in regards to the resources provided for such youth. The researcher will look to explain the influences of higher and lower levels of average income on the number of programs presented to youth with ASD. Demographic data will be collected from the U.S. Department of Commerce Bureau of Economic Analysis and the United States Census Bureau.

There are no risks or discomforts associated with this survey. There may be no direct benefits to you; however, by participating in this study, you may help us understand the potential benefits for youth with ASD. These include: understanding that participating in extracurricular activities increases social skills an self-management skills in a variety of social situations. The most common extracurricular activities and why they

are common will be addressed. The research will also highlight the social skills benefits of these specific activities. Additionally, if the hypotheses of the current study are supported, the importance of participating in extracurricular activities will be evident. These activities can become interventions for youth with ASD.

Your response will be kept confidential. We will store the data in a secure computer file and the file will be destroyed once the data has been published. Any part of the research that is published as part of this study will not include individual information or district information. If you have any questions about the survey, you can contact me at: munyonk2@students.rowan.edu.

Please complete the checkbox below.

Completing this survey indicates that you are voluntarily giving consent to participate in the survey

Please take a moment to answer the following questions. Thank you for your participation. It is greatly appreciated and important to this research.

- Does your district offer extracurricular activities/programs (community- or school-based) for youth with ASD?
    - If so, what activities/programs, specifically, are offered?
    - Is a fee required to participate?