Honors Research Project:

The Efficacy of Summer Camp Programs in Improving Social Skills for Children with Autism

Julie Sandish and Kelly Brown

The University of Akron
ABSTRACT

A review of the literature found that summer camps were used in hopes to improve social skills in children with autism spectrum disorders (ASD). Preliminary research has shown that these summer camp programs have the potential to show some improvements in social skills in this population. Although these studies have some promising results, the effectiveness of summer social skills camps has not been fully explored and several design limitations exist. This current study was conducted in order to determine if summer social skill camps affected requesting skills in children with autism. The study was conducted at two separate camp facilities, one being a recreational camp setting and the other a clinical outpatient setting. The participants for this study were two children who had mild to moderate autism and were aged 9 and 11. Each child was observed at each site and data were collected on the number of times the participants requested an object or action. Parent perceptions of the effectiveness of these summer camps were also explored using survey research. The results indicated that each child showed a modest increase in the number of times objects or actions were requested over baseline data. Results also showed that the subjects increased the variety of objects or actions requested and to whom the request was made. Researchers also noted that the requests changed from those only directed at adults to requests of peers as well. Survey responses from the parents showed satisfaction in their child’s social abilities after the completion of both camps. The results showed that there was a higher increase in requests for an object or action in the clinical camp setting. The study was limited by small sample size, multiple treatment interference, difficulty matching subjects, and convenience sampling. Survey research often introduces biases into the study. Recommendations for future research were provided.
CHAPTER I
INTRODUCTION

The Efficacy of Summer Camp Programs in Improving Social Skills for Children with Autism

Background of the Problem

The ability to use social skills is a very important aspect of everyday life (Owens, Granader, Humphrey, & Baron-Cohen, 2008). Using these skills allows individuals to form close relationships with others and interact appropriately in social situations (Owens et al., 2008). Social skills often develop naturally and require little explicit instruction; however, for individuals with autism, this is not the case (Owens et al., 2008). The American Psychiatric Association (2010) states:

> Autism spectrum disorders which include autism, Asperger’s syndrome, and pervasive developmental disorder- not otherwise specified, are disorders characterized by a host of difficulties with social interactions, communication, and repetitive behaviors or interests (p. 257).

The presence of social impairment is one of the distinguishing features of autism (Owens et al., 2008). The social impairments can vary in degree and severity, but the presence alone has devastating effects on the quality of life for the individuals experiencing them (Chung, Reavis, Mosconi, Drewry, Matthews, & Tassé, 2006).

The Centers for Disease Control conducted a study to investigate the prevalence rates of autism in children (Rice, 2006). The study examined 8 year olds in eleven areas across the United States in 2006 (Rice, 2006). Approximately 1% of children, one child in every 110 in the eleven areas, were found to have an autism spectrum disorder (ASD) (Rice, 2006). This prevalence rate for 8 year old children was found to be a 57% increase from a previous study that
was conducted in 2002 (Rice, 2006). Because of this increase, concerns for availability of appropriate treatment interventions have been raised (Cotugno, 2009).

A considerable amount of research has been conducted on social skill intervention programs to look into their effectiveness and the components that make them successful. Although no one intervention program has proved to be the most successful, many researchers have found promising effects in a variety of different methods (Barry, Klinger, Lee, Palardy, Gilmore, & Bodin, 2003; Brookman, Boettcher, Klein, Openden, Koegel, & Koegel, 2003; Kroeger, Schultz, & Newsom, 2006; Lopata, Thomeer, Volker, & Nida, 2006; Lopata, Thomeer, Volker, Nida, & Lee, 2007; Owens et. al, 2008; Sansosti, 2010; Tse, Strulovitch, Tagalakis, Linyan Meng, & Fombonne, 2007; & Walker, Barry, & Bader, 2010).

Although these aforementioned studies on social skills have shown some positive results, these studies also have shown a few common deficiencies. Several of the studies were conducted as early as 1976, making newer research necessary. In 1976, early intervention was rare and many children did not have access to numerous special services that are currently available. Technology has also changed over the years and allowed for better interventions. In addition, studies containing mixed methods of intervention make it hard to discover which method is the most beneficial. Finally, few studies have researched the effect of intervention on requests for an object or an action. Requesting an object or action is an important aspect of daily social interaction, thus making it a necessity for individuals to be able to use. This skill also enables individuals to be functional in their environment. It is crucial to enabling individuals to live independently.

This present study aimed to look strictly at progress made toward the social skill of requesting for an object or action during summer camp sessions. It then aimed to go one step
further to analyze which type of summer camp program was most effective: a more naturalistic “play” camp or a more structured clinical day camp. This research aimed to expand upon the already existing research and provided a more in depth look at this specific skill.

Purpose of the Study

This exploratory research study was conducted to determine which of two types of social skill interventions were more effective at improving request for an action or object: a weekly camp in a clinical environment or a daily camp in a more recreational “camp” atmosphere. Survey research was also used to determine whether or not parents perceived their child’s summer camp program to be effective.

Research Questions and Hypotheses

The research questions for this study were the following:

- Will summer camp programs improve requesting for an action or object in children with autism?
- Which summer camp setting appears most effective in improving the social skills of children with autism: a recreational setting or a clinical setting?
- Did the parents feel that their child’s social skills changed over the course of the summer program?

The researchers hypothesized that both the recreational and clinical summer camp setting would improve requesting for an action or object, but the clinical setting would be more effective. It was also hypothesized that the parents would feel their child’s social skills had improved.
Definition of Terms

“Social skills can be defined as specific behaviors that result in positive social interactions and encompass both verbal and non-verbal behaviors necessary for effective interpersonal communication” (Rao, Beidel, & Murray, 2007, p.1). Examples of such skills could include maintaining eye contact, asking and responding to questions, and smiling (Rao, et al., 2007).

For this present study, the researchers defined a request for an object as any time the child initiated a request for a tangible item from another individual. For example, this could be done by the child asking for a particular toy to play with, asking for a certain color marker, or asking for a snack.

Also for the present study, the researchers defined a request for an action as any time the child initiated a request for a certain activity to occur from another person. For example, a request for an action might include asking a peer if they can join in a game, asking to go first in an activity, or asking to use the restroom.

A clinical setting was defined as one that took place in a hospital under the supervision of a certified occupational or speech therapist and with the help of the volunteers. This study’s particular setting was a 6 week outpatient camp that met once a week.

A recreational camp was defined as one that took place in a relaxed, “camp-like” environment under the supervision of staff from various specialties and volunteers. In the researchers’ present study, the recreational camp was one that took place in a school and that met daily for 5 weeks.

Study participants were two individuals with autism. According to the American Psychiatric Association, autism is characterized by “impairment in social interaction, impairment
in communication, and restricted repetitive and stereotyped patterns of behavior, interests, and activities” (American Psychiatric Association [DSM-IV-TR], 2000). Individuals with autism also exhibit “delays or abnormal functioning in at least one of the following areas, with onset prior to age 3 years: (1) social interaction, (2) language as used in social communication, or (3) symbolic or imaginative play” (DSM-IV-TR, 2000).

**Limitations**

Several limitations in the study were recognized. The researchers tried to match the two subjects as closely as possible by looking for two children of the same gender, similar age, and similar autism spectrum disorders. However, this was more difficult than anticipated as the researchers had a limited number of children whose parents had shown interest in participating in the study. The researchers ended up choosing two males who both had mild to moderate autism and who were of similar ages. Child 1 was age 9 while Child 2 was age 11. Even though the difference was only two years, this slight age difference could pose some potential limitations to the outcome of the research because one child may be more advanced in language or cognitive skills than the other due to maturation.

The history of therapy was not examined for the two subjects, which also posed limitations as one child may have received more speech therapy that targeted social skills than the other. It was also unknown whether each subject was receiving any additional therapy outside of the summer camp program. Even though both children met all of the predetermined study criteria, the fact that they were not exactly the same may have affected the results.

Next, the sample size used in the research study was very small and cannot be used to represent nor generalize the results back to the entire population of children with autism. The researchers could only speculate and make hypotheses regarding treatment effectiveness.
An additional limitation was related to attendance. Child 1 only attended five of the six planned camp sessions throughout the summer. His absence from camp that day was unexpected and the structure of the camp could not be arranged to accommodate for his one absence. This may have influenced his outcome due to the total number and frequency of sessions that the clinical camp provided (i.e., he only attended 5/6 sessions or 83% of them).

Finally, the emotional states of the subjects on the days that the researchers observed their social skills may have also impacted the frequency of their requests for an object or action. For example, when Child 2 was observed during the last week of camp, he was visibly upset and frustrated that camp was coming to an end very soon. Because of this, the data collected may not reflect the subject’s actual social skills at the time, but due to time constraints, the researchers were unable to collect further data.

Limitations were also noted for the survey research portion of the study. By using surveys as method of obtaining information, the researchers may receive some unreliable results. The researchers’ survey was based solely on subjective opinions of the parents and may not accurately represent the actual behaviors of the children.
CHAPTER II

REVIEW OF LITERATURE

A variety of methods of teaching social skills to individuals with ASD currently exist. These methods can be grouped into those that are performed without peers and those that involve interaction with peers. Peers may be typically developing or also have ASD. Those programs that are conducted without peers include video modeling, social skills training, social stories, and naturalistic setting approaches. Those that can include peers include social skills groups, peer-mediated groups, outpatient clinics, and summer camp programs. Both of these groups, with and without peers, have been shown to improve social skills in individuals with ASD.

Video modeling has been used to improve social skills in individuals with ASD. Through this approach, children with ASD are able to visualize the social situations and have an opportunity to respond or imitate what they see (Kroeger et al., 2006). Research showed positive results, possibly because children with ASD show strength in visual learning. Video modeling could enhance the children’s skills development through the leisurely setting of watching a video (Kroeger et al., 2006).

Social skills training is another method of teaching social skills and many specific programs have been developed to be used in training social interactions. This method involves specifically teaching certain skills such as sustaining eye contact, initiating requests, and responding to questions by means of social learning techniques (White, Keonig, & Scahill, 2006). The social skills training method is very task oriented and breaks down many social interactions into specific steps allowing for them to be taught more easily to the individual (Welton, Vakil, & Carasea, 2004). Social skills training programs may also occur in groups which allow the members of the group to practice with one another. Reported success rates for
this method were high (Tse et al., 2007). However, further research was required to see if this was the best method for training such skills. Tse, Strulovitch, Tagalakis, Meng, and Fombonne (2007) used a basic social skills training group in a hospital for adolescents with Asperger's Syndrome and high-functioning autism. The 12 week program met weekly and focused on teaching specific social skills through role playing and practice activities. Results of this study indicated that social skills groups or more specifically, social skills training, are an effective means of improving the social interactions of individuals with ASD (Tse et al., 2007).

Rogers (2000) also found social stories to be an acceptable and successful method of instruction. In this method, the individual with ASD reads or is read aloud a story that directly teaches the unspoken rules of social interaction and the reasons behind these rules. The story is presented in a noncritical, but supporting manner and as an instructional tool (Rogers, 2000). These stories are especially useful for individuals with ASD who strive for a routine and structured environment. The stories include simple drawings or sequences that show events in a social situation which may be beneficial because they may increase predictability and reduce future anxiety for the individuals who encounter those events (Welton et al., 2004). Bellini and associates (2009) also found that social stories were very useful in teaching skills that included initiating interactions, ability to make transitions, and speaking with correct loudness and intonation. Finally, a study conducted by Sansosti and Powell-Smith (2006) indicated the effectiveness of this type of intervention (as cited in Rao, Beidel, & Murray, 2007). The results of this study showed that significant increases were made in positive social skills after the beginning of this intervention for two of the three subjects (Rao et al., 2007).

Naturalistic settings have been used for most of the studies cited previously and appeared to be a very valuable aspect for acquiring and retaining the social skills knowledge that the
individuals have learned. In naturalistic approaches, the materials and activities that were used to teach the social skills are taught in a manner as close to daily life as possible (Owens et al., 2008). These newly acquired skills can then be translated into the real world and used in real life settings. Also, by using some of the individual’s specific interests, motivation for learning and participation increases. These types of methods have shown increased generalization into everyday life (Owens et al., 2008).

Outpatient clinics are also frequently used to increase social skills and usually involve the aid of peers. One study by Barry, Klinger, Lee, Palardy, Gilmore, and Bodin, in 2003 examined four elementary-aged children with ASD and the effectiveness of an outpatient clinic on their social skills. The camp lasted a total of eight sessions and focused on specific social skills including greeting, conversation, and play skills. Results revealed that the children’s greeting and play skills improved, but conversation skills showed less improvement. However, the researchers found that these improvements did not generalize well to nonclinic settings (Barry et al., 2003). Overall these authors concluded, “These results indicate that an outpatient clinic–based social skills group intervention can improve several key social behaviors in children with autism (e.g., in greeting and play skills) when specific behaviors taught during the therapy are measured” (p. 698). It appeared as though the social skills progress made can be attributed to the curriculum alone, and is not necessarily carried over to other settings (Barry et al., 2003).

Social skills groups have shown to be beneficial in a variety of settings such as a school or clinic either with a homogenous group or with the inclusion of typically developing peers (Lopata et. al, 2007). These groups allow for the individuals to work on their specific social skill difficulties as well as provide opportunities for peer interaction in an environment similar to everyday life. Also, when children are placed in a group with peers dealing with similar social
skill deficits, the group setting provides a safe environment for them to share their personal struggles (Lopata et al., 2007). Group work can also give children the opportunity to practice their social skills in a controlled environment (Rose & Anketell, 2009). Social skills groups have also been used as a preferred method of treatment because they allow for many children with ASD to receive treatment at once, they offer a cost effective alternative to individual therapy, and they provide practice partners for children with autism spectrum disorders (Kroeger, et al., 2006).

In addition to small group social skill instruction, professionals have tried to teach social skills through the inclusion of typically developing peers (Owens et al., 2008). These peer-mediated groups have been shown to improve social competence (Owens et al., 2008). In these groups, the typically developing peers were trained to initiate, prompt, and encourage social behavior with the individuals with ASD. The use of trained peers enabled the children with ASD to practice their social skills with accommodating, willing, and motivating same age peers (Owens et al., 2008). Although the research on peer mediated approaches has shown promise, researchers identified limitations such as the future separation of the peers from the group. They questioned whether the improvements shown in the group could be attributed to individual improvements or constant interaction from the peers (Kroeger et al., 2006). Issues with this method also include the amount of time and effort required to train the peer mediators and the applicability to the outside population and other peers within their schools (Owens et al., 2008).

A final method to improve social skills for individuals with ASD and the most relevant method to this study is camp treatment programs, or more specifically, programs that occur in the summer. These types of programs occur when the child is transitioning from one school year to the next. Summer can be a hectic, stressful, and unstructured time for children, especially
children with autism. Summer camp programs can provide the necessary structure and routine for children while allowing them to interact with other peers and participate in activities that may serve beneficial to their communication and social abilities (Walker et. al, 2010). Many summer camps have play activities incorporated in their daily routine in recreational settings. Both structured and unstructured play contributes to the learning process and is important when developing social skills (Walker et al., 2010). Structure and unstructured play were found in both settings studied by the researchers.

As mentioned previously, only few studies have focused on summer camp settings for children with ASD. These include a 3 week summer program for 18 children with autism (Walker et. al, 2010), a therapy group of 30 boys with Asperger’s (Lopata et. al, 2006), an inclusive summer camp program for 8 children with autism (Brookman et. al, 2003), and therapist and parental perceptions of a summer camp for children with autism (Walker et. al, 2010).

Hung and Thelander (1978) studied a three-week summer program for 18 children with autism (as cited in Walker et. al, 2010). Their average participant age was nine. The researchers evaluated the children in four areas: self-help skills, language training, generalization of language from training to non-training settings, and reduction of undesirable behaviors. At the conclusion of the program, they found that each of the children improved in at least one area by 15% (as cited in Walker et al., 2010). Although improvements were shown, this single study was conducted over 32 years ago, clearly showing a need for additional research.

Another study, conducted by Lopata, Thomeer, Volker, and Nida (2006), examined cognitive-behavioral therapy on a group on 30 boys with Asperger’s Disorder, aged 6 to 13 years. The program lasted for six weeks and used social skills training, behavioral treatment, or
a combination of both. One of the primary goals was to see if generalization of social skills occurred. Based on both parent and therapist ratings, the study concluded that the summer program was successful in the improvement of social skills (Lopata et. al, 2006). These researchers then conducted a second study to expand upon and replicate their findings from the first. The second study was successful in replicating the findings of the first, especially in the area of social skills. Both parent and therapist ratings indicated significant improvement (Lopata et al., 2007).

Brookman, Boettcher, Klein, Openden, Koegel and Koegel (2003) performed a study of an inclusive summer camp program for children with disabilities. They observed eight children with autism aged four to ten years. The camp encouraged social skills by use of priming, self-management, and peer involvement. Results revealed that the ability to interact socially with peers increased in the children with autism as a result of this program (Brookman et. al, 2003).

Finally, Walker et al. (2010) found that from pre- to post-treatment the therapists perceived improvement in children with autism in these areas: verbal communication, social interaction, attention to task, and transitions. Parents also perceived improvement in their child’s verbal abilities and social skills. The findings “underscore the importance of considering summer camps as a treatment option” (Walker et al., 2010, p. 319).

Research studies are the most effective way that new treatments for children with ASD may be evaluated. As of now, there is not a known cure for ASD. Because of this, research must continue to be done so that treatment may be as effective as possible, improving the quality of life for children struggling with ASD. In addition, research may determine which treatment avenues would be most effective, further helping individuals that are diagnosed with autism to overcome their obstacles (Walker et al., 2010).
In summary, the previously conducted studies that have addressed the improvement of social skills in individuals with ASD showed some positive results. However, methodological limitations existed. The research typically focused on different methods available for teaching social skills but rarely focused on summer camp programs as a major treatment option. When research was focused on summer camp programs, it was simply on the effectiveness of the program and did not compare differing camp programs in the summer such as recreational and clinical camp settings. The present study aimed to fill the gaps in the research and address some of these shortcomings.
CHAPTER III
RESEARCH METHODS

*Pre-experimental Single Subject Comparison Design*

The study was structured as a pre-experimental single subject comparison design that compared two summer camp settings. The independent variable in the study was the use of summer social skill camps. The dependent variable in this experiment was the subjects’ requesting for an object or action.

The first site was a summer day program held at a hospital located in Northwest Ohio and conducted by the pediatric division of Speech Language Pathology and Occupational Therapy. These annual summer camp programs were designed for children that typically came to the center for out-patient therapy. This particular camp program was held in the sensory gym of the hospital. After attending a morning summer camp program, the subject engaged in one-on-one speech therapy in a different room of the same hospital in the same afternoon.

The second site was a recreational summer day camp program located at a high school in Northeast Ohio. The site included a grassy outdoor play area, a classroom for arts and crafts, another classroom for cooking activities, and the city’s local natatorium for swimming.

The first site was run under the supervision of a certified speech-language pathologist and occupational therapist and run with the help of volunteers. Volunteers were interested in the field of speech therapy but had no previous training for the camp program.

The second site consisted of 11 counselors, 1 site director, 1 nurse, and a varying number of daily volunteers. The staff was of varying specialties, consisting mainly of college age students and local teachers. No specific expertise was required although staff was briefly trained in behavior management techniques and providing care to individuals with special needs before
the start of the program. The staff to participant ratio was 3 to 1 with each counselor having a
group of 2 to 3 campers each day.

The clinical camp consisted of a group of 3 children who ranged in age from 6 to 10
years old. The recreational camp site had about 30 to 35 participants who ranged in age from 7 to
21 years old.

The program at the hospital was held once a week for six weeks. Each camp session
lasted 1 hour while the individual speech therapy that the first subject received before attending
group activity was also 1 hour. The recreational camp was a daily camp program held for five
weeks over the summer. The camp lasted from 10:00 A.M. until 4:00 PM each day.

The program at the hospital focused on improving overall language abilities, the
understanding of how the body works, and the aforementioned social skills in a clinical setting.
Child 1’s individual therapy worked on goals through creating sentences and writing them and
playing games such as “Go Fish” and “Guess Who” to improve the ability to ask questions and
make requests of another.

The recreational camp program was specifically designed for individuals with various
disabilities that included ASD, Down Syndrome, ADHD, and cerebral palsy. The program
allowed the participants to engage in many activities that practiced fine motor, gross motor,
communication, and self-care skills on a daily basis. The program’s motto, as shown on the
website, stated that “participants in the program thrive throughout the summer and many
experience greater success with their re-entry to traditional school in the fall.” The organization
also contended that it is “a place to make new friends, increase self-esteem, and enhance social
skills.” Daily activities for participants included singing, swimming, arts and crafts, field games,
and cooking. This program emphasized interactions with other children and adults through play in a relaxed “camp like” environment, thus strengthening social skills.

Table 1 below displays the previously discussed characteristics of each camp setting.
Table 1

_Camp Setting Characteristics_

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Recreational Camp</th>
<th>Clinical Camp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location of Camp</td>
<td>local high school</td>
<td>hospital sensory gym</td>
</tr>
<tr>
<td>Length of Sessions</td>
<td>6 hours</td>
<td>1 hour</td>
</tr>
<tr>
<td>Length of Program</td>
<td>5 weeks (25 sessions)</td>
<td>6 weeks (6 sessions)</td>
</tr>
<tr>
<td>Frequency of Sessions</td>
<td>daily</td>
<td>weekly</td>
</tr>
<tr>
<td>Number of Peers</td>
<td>30-35</td>
<td>3</td>
</tr>
<tr>
<td>Age Range of Peers</td>
<td>7-21</td>
<td>6-10</td>
</tr>
<tr>
<td>Number of Staff</td>
<td>11 counselors, 1 site director, 1 nurse, and volunteers</td>
<td>1 SLP, 1 OT, and volunteers</td>
</tr>
</tbody>
</table>
Survey Design

As a complement to the objective data gathering, the researchers created and employed subjective surveys to be completed by the parents of each child. These surveys examined the parents’ expectations of the camp as well as their own perceptions of the improvement or decline in their child's social skills. These surveys were administered three times during the study.

Pre-experimental Single Subject Comparison Participants

Because the researchers structured this experiment as a pre-experimental single subject experimental design, the researchers each selected a child at the start of the camp programs that met the predetermined criteria to study individually from each site. The researchers chose from a population that included males with a diagnosis of mild to moderate level on the autism spectrum between age 8 and 17. Their goal was to choose the two participants who appeared most similar to one another so that the results could be easily compared.

In order to select the participants, the researchers used convenience sampling by asking each of the camp directors to give out recruitment letters to candidates they found that met the predetermined criteria. They were to sign these letters so that their information could be released to the researchers by the camp sites. The researchers then contacted the parents of the qualifying children to seek their participation in the study. The researchers informed them of their child's role in the study and of their personal role in filling out the surveys. Upon agreement, the researchers provided them with proper informed consent and assent paperwork by mail or in person. These forms were collected prior to the start of research.

The final sample for research included two children. Child 1 was nine years old and Child 2 was eleven. Both were males and were at a similar level on the autism spectrum (mild/moderate).
Survey Participants

The surveys were completed by the mothers of both subjects for the duration of the study. Both mothers were selected to participate in the surveys as they had been the parent to sign the consent form and agree to participate in that portion of the study.

Pre-experimental Single Subject Comparison Instrumentation

To evaluate social skills at each site, the researchers focused on the social skill of request for an object or action. The researchers did this in a three step process. First, they observed the participants during their camp sessions. Second, they tallied the number of times each child used the skill of request for an action or object. Third, the researchers described the actions and objects that were tallied. This allowed the researchers to analyze these tallies further to determine the type of request (object/action) and the type of communication partner.

Both children were observed during the first and last week of treatment. The first observation was taken in order to establish a baseline for later comparison.

Survey Instrumentation

The surveys were created by the researchers and contained questions rating their child’s abilities on a Likert Scale as well as open ended questions. The surveys were handed directly to the parent or mailed to the family’s home during the first week of camp, at the conclusion of the camp, and during the child’s return to school in the fall. Surveys were returned by mail or in person.

In conclusion, the research was conducted as a Pre-experimental Single Subject Comparison Design and also included survey research. Participants were selected through convenience sampling and included two males aged 9 and 11 with mild to moderate autism and surveys were filled out by their mothers. The social skill of requesting an object or an action was
observed, tallied, and described by the researchers for each subject at their particular camp site, clinical or recreational.
CHAPTER IV
RESULTS

The researchers observed the skills of action and object requests for each child in his specific camp setting. The researchers compared the final data for each child to the baseline data to determine if the particular camp program they attended was effective at teaching social skills for the subject. After the researchers compared each child’s objective data from the beginning of camp to the objective data from the end of camp, they then compared Child 1’s data to Child 2’s data to determine if one program would appear to be more effective in impacting the social interactions. After all of the surveys were completed and returned, the researchers compared the survey results at the beginning of camp to the end of camp and also to post-camp results for each child. The findings are discussed below.

Data were collected by observing the two children at each camp. During the 6 week long summer camp, Child 1 at the clinical camp setting missed 1 full day but attended the other 5 camp sessions. Child 2 at the recreational camp setting attended all camp sessions during the 25 day program. Survey data were also collected from the two children’s parents at three points during the study: the first week of camp, the last week of camp, and two months after the conclusion of camp.

To begin data collection, baseline information was recorded for each child during the first week of each summer camp. During the first week of therapy, Child 1 at the clinical camp made two requests in the hour group session. These involved a request from the therapist for a certain color marker to mark their “engines” and requesting to go first at the obstacle course, also directed at an adult. Baseline was recorded as one request for an object and one request for an action.
The first observation made of Child 2 at the recreational camp showed that he made 30 requests for an object or action. Most of the time, the request was for another camper to play with him (e.g., request to play tag). Child 2 requested objects or actions from both children and adults at an equal frequency.

Post-test observations were taken during the last week of each summer camp session. During the last week of therapy, Child 1 at the clinical camp made a total of three requests in the hour group session. The first request was to go through the obstacle course. This request was similar to the request that was observed during the baseline observations. Second, Child 1 requested that another child take their turn at a game the group was playing. Finally, Child 1 requested to go down the slide that was in the room. This increase from two to three requests was a 50% increase over the baseline observations. The requests this time were all for actions and were made twice of adults and once of his peers. During the post-test observations for Child 2 at the recreational camp, he had 33 requests, similar in nature to the other requests for another child or staff member to play with him. The increase in 30 to 33 requests was an increase of 10% over baseline data.

Parent observations were also collected through use of surveys. These surveys consisted of questions that rated the child’s abilities on a Likert scale from 1 (strongly disagree) to 7 (strongly agree). The survey also contained open-ended questions in which parents were to answer questions regarding the average number of times their child requested an action or object daily and their perceptions of the camp programs. The surveys were administered at the beginning of the study, at the conclusion of the camp, and upon the child’s return to school in the fall. Survey questions and responses are displayed in Tables 2 through 4.
The parent of Child 1 at the clinical camp setting ranked his ability to request objects and actions of others at the beginning of camp as an average of 15-20 times daily. At the end of the six week camp session, Child 1’s parent ranked his ability to request objects and actions of others as an average of 20 or more times daily, an increase over baseline data.

The parent of Child 2 at the recreational camp setting ranked his ability to request objects and actions of others at the beginning of camp as an average of 5-10 times daily. Child 2’s parent ranked his ability to request objects and actions of others as an average of 10-20 times daily. This also showed an increase over baseline data.

The final survey revealed that Child 1’s parent ranked their ability to request objects and actions of others as an average of 30 or more times daily. This survey measured the maintenance of requesting an object or action once the child had finished camp and had returned back to school. This number was an increase from the post-camp survey where it was stated 20 or more times daily.

In the final survey, Child 2’s parent ranked their ability to request objects as 10-20 times daily and actions 20-30 times daily. This survey measured the maintenance of requesting an object or action once the child had finished camp and had returned back to school. The number reported was an increase from the post-camp survey where it was stated 10-20 or more times daily.

All three surveys that were given to parents included an open-ended questions portion. These questions are discussed below.

The pre-test survey given to parents during the first week of camp asked their reasons for enrolling their child in the specific summer camp program and also how their child currently requested objects or actions. An additional comments section was also included.
The parents of Child 1 stated they enrolled their child in the clinical summer camp because “we believe any interaction with peers will help improve his social awareness and skills.” When asked to describe how their child requests an object or action they stated “He usually holds the object and asks verbally. He also knows the importance of the word please.” Finally, Child 1’s parent added “He also asks many questions throughout the day. This is a recent development in the last 6 months or so.”

Child 2’s parent stated they enrolled their child in this recreational summer camp because “He loves swimming so much. He loves having a juice box in his lunch. He loves being around other children.” The parent responded that Child 2 requests objects or actions “with words.” No additional comments were made on this survey.

The first post-test survey given to parents during the last week of camp included questions as to what improvements have been seen since the beginning of the summer camp program in regards to requesting an object or action. It also included why the program did or did not meet their expectations regarding their child’s social skills and once again asking how their child requests an object or action. An additional comments section was also provided.

The parent of Child 1 at the clinical camp stated she had seen improvements in “persistence! He will keep asking until you acknowledge his request.” She also stated that her expectations were met regarding the program because “I think he’s acclimating better with other kids he doesn’t know.” The parent once again stated that the child requests an object or action verbally. Finally, in the additional comments section, the parent stated “He is getting more comfortable making his feelings/opinions known. He is ‘coming out of his shell!’ It’s great to see his personality come to light!”
Child 2’s parent stated that she has seen “subtle changes” in “better pronoun use and language.” The parent stated that her expectations of the camp had been met because “He was able to better socialize at home with neighbor children.” The parent also stated that the child requested an object or action verbally by saying “can I…?” Finally, the parent also noted that when averaging the number of requests in a day that the child made, “it depends on whether we actually do said actions. If we don’t, he’ll keep asking.” No additional comments were stated.

The final post-test survey given upon the child’s return to school in the fall asked once again how the child requests an object or action and provided a section for additional comments.

When asked how her child requested an object or action, Child 1’s parent stated “He will address the person first. Sometimes his word order is mixed up or reversed. If it is, we correct him on the spot.” In the additional comments section, the parent stated “We continue to work on using the first person instead of third person. He’s beginning to self-correct, but on occasion needs to be reminded to use I or me.”

Child 2’s parent responded once again that her son requested an object or action verbally by using “Can I…” or “Are you ready for…?” The parent stated in the additional comments section “I asked his teacher for her input and she gladly complied. I’ve included her letter. Hope this helps.” The letter included with the survey regarding Child 2’s social skills from last year to this school year states as follows:

Child 2’s social behaviors have improved greatly since the end of last year. Child 2 seems more aware of himself and others as well as others emotions. He is accurately pairing expressions and tones with emotions. He is quickly picking up on alternative methods of greetings and positive peer interactions. He is better able to describe events, activities,
and people. He has made a big improvement since the end of last year to the beginning of this year. I am excited about his progress in the area of social skills (classroom teacher).

The parent also commented that when rating their child’s average number of requests in a day, “It varies so much from day to day and from obsession to obsession.”

All three surveys also contained a portion for parents to rate their child’s abilities on a Likert scale. These questions and responses are shown in Tables 2, 3, and 4 below.
Table 2

*Likert Scale Responses from Parents: Pretest*

<table>
<thead>
<tr>
<th>Survey Questions</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. I expect this camp program to improve my child’s social skills.</td>
<td>Child 1</td>
</tr>
<tr>
<td></td>
<td>Child 2</td>
</tr>
<tr>
<td>3. When my child wants an object or an action to occur, they can ask for it. For example, if my child wants more juice, they will verbally ask for it. Also, if my child wants to play with another child, they are able to approach the child and ask if they want to play.</td>
<td>Child 1</td>
</tr>
<tr>
<td></td>
<td>Child 2</td>
</tr>
<tr>
<td>4. My child is able to request an object or action in different settings. For example, they request objects at home, on the playground, etc.</td>
<td>Child 1</td>
</tr>
<tr>
<td></td>
<td>Child 2</td>
</tr>
</tbody>
</table>
Table 3

*Likert Scale Responses from Parents: Post-Test #1*

<table>
<thead>
<tr>
<th>Survey Questions</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When compared to the beginning of the summer camp program, my child has improved their social skills in requesting for an object or action.</td>
<td>Child 1 Agree (6) Child 2 Agree (6)</td>
</tr>
<tr>
<td>2. The summer camp program met my expectations regarding my child’s social skills.</td>
<td>Child 1 Agree (6) Child 2 Strongly Agree (7)</td>
</tr>
<tr>
<td>3. When my child wants an object or an action to occur, they can ask for it. For example, if my child wants more juice, they will verbally ask for it. Also, if my child wants to play with another child, they are able to approach the child and ask if they want to play.</td>
<td>Child 1 Strongly Agree (7) Child 2 Agree (6)</td>
</tr>
</tbody>
</table>
Table 4

*Likert Scale Responses from Parents: Post-Test #2*

<table>
<thead>
<tr>
<th>Survey Questions</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My child’s improvements in the social skill of requesting an object or action</td>
<td>Child 1</td>
</tr>
<tr>
<td>have been maintained since the conclusion of the summer camp program.</td>
<td>Strongly Agree (7)</td>
</tr>
<tr>
<td></td>
<td>Child 2</td>
</tr>
<tr>
<td></td>
<td>Disagree (2)</td>
</tr>
<tr>
<td>2. When my child wants an object or an action to occur, they can ask for it.</td>
<td>Child 1</td>
</tr>
<tr>
<td>For example, if my child wants more juice, they will verbally ask for it. Also,</td>
<td>Strongly Agree (7)</td>
</tr>
<tr>
<td>if my child wants to play with another child, they are able to approach the child</td>
<td>Child 2</td>
</tr>
<tr>
<td>and ask if they want to play?</td>
<td>Disagree (2)</td>
</tr>
</tbody>
</table>
In conclusion, data were collected during the first week of camp and the last week of camp by observing requesting an object or action and tallying the number of times the requests were made. The communication partner that was involved in each request was also noted. Survey data were also collected during the first week of camp, the last week of camp, and two months following the conclusion of camp. This data included open-ended questions and questions on a Likert scale.

Data were later analyzed to explore results. The data showed a change over baseline data from two requests at baseline to three requests at the end of camp for Child 1 in the clinical camp setting, a 50% increase over baseline data. The data for child 2 in the recreational camp setting showed a change from 30 requests at baseline to 33 requests at the end of camp, a 10% increase over baseline data. The requests changed in nature for Child 1 in the clinical camp setting from one request for an action and one request for an object both directed at an adult to three requests for actions at the end of camp that were directed at both adults and peers. The requests for Child 2 at the recreational camp remained similar in nature from baseline to the end of camp with Child 2 requesting actions and objects of both adults and peers at equal frequency. Data from the surveys revealed that the parents of Child 1 in the clinical camp setting perceived a change in frequency of requesting objects or actions daily from 15-20 times at baseline, 20 or more times at the end of camp, and 30 or more times upon the child’s return to school in the fall. The parents of Child 2 in the recreational setting reported a perceived change in frequency of requesting objects or actions daily from 5-10 times at baseline, 10-20 times at the end of camp, and 10-20 times for objects and 20-30 times for actions upon the child’s return to school in the fall.
The purpose of this study was to determine if summer camp programs were beneficial to children with ASD in improving the social skill of request for an object or action and if so, which type of program appeared to produce more successful results for each child. The researchers hypothesized that summer camp programs were beneficial to improving and maintaining social skills in children with ASD. The researchers also hypothesized that the clinical setting for these types of programs would be more beneficial than the recreational camp setting. The researchers also expected parents to note these improvements in the surveys that were administered. The data supported the hypothesis that summer camp programs were helpful in improving the skill of requesting an object or action. Acquired data also supported the hypothesis that clinical settings were more beneficial at improving the skill of requesting an object or action when compared with recreational camp settings. However, these results cannot be generalized to the entire population of children with autism. Results from parent surveys also supported the hypothesis that parents would note improvements in their child’s social skills as results from these parent surveys indicated that improvements had occurred in their child’s social skills throughout the summer camp experience.

According to the results for Child 1 at the clinical camp setting, a 50% increase over baseline was observed in his ability to request and object or action occurred. The first week of camp, Child 1 made one request for an object and one request for an action, providing a total of two requests. These were both directed at adults. The last week of camp, Child 1 made three requests for actions. This time, the requests were directed not only at adults but were also made
of peers. This displays improvement in the number of times a request was made as well as improvement in the communication partners.

The results for Child 2 at the recreational camp setting showed a 10% increase over the baseline data in requesting objects or actions between the beginning of the camp program and the conclusion of the program. The first week of camp, Child 2 made 30 requests that included requests for both objects and actions. These requests were made for both children and adults at equal frequencies. The last week of camp, Child 2 made 33 requests similar in nature to the requests made during the first week of camp. This shows a slight improvement in the frequency of requests, but no improvement in the communication partners.

Based on objective data gathered in this present study, the clinical camp setting showed to be more beneficial in improving the social skill of request for an object or action. Although fewer requests were made, the improvement over baseline data was greater for Child 1. The increase in requests for Child 2 only showed a 10% increase over baseline data so although he made many requests, the percentage of improvement was smaller. However, the results of this particular study cannot be generalized by percentage increase alone. It would have been very difficult for Child 2 to improve by 50% as their initial measure was so high, while Child 1 was able to show this large percentile increase because initial measure was lower.

The clinical camp setting appeared to be more beneficial because it focused more directly on improving social skills than the recreational camp setting. In the recreational camp setting, social skills were never directly addressed. Researchers believe that improvements were still seen in the recreational camp setting due to more opportunities for peer interaction. Child 1 at the clinical camp setting had fewer opportunities for social interaction with his peers because the number of children that attended each day was significantly less than the number of children
present for Child 2 in the camp setting. The attendance of the peers each day also varied which caused opportunities to vary day to day for each individual camp site.

Survey results for Child 1 showed an increase in his social skill ability as well and indicated the parents also perceived the positive change. The final survey revealed that these social skill improvements remained with Child 1 into the fall, as the average number of times he requested an object or action to occur daily increased from 20 or more at the end of camp to 30 or more times. The parent also indicated Child 1 was beginning to self correct for himself. This parent recognition of the perceived positive change in their child’s ability further demonstrated the effectiveness of the summer camp programs on social skills. Without this summer camp program, Child 1’s social skills might have shown much less improvement. He might not have gone back to school at the level he was able to this year because of the skills developed in the summer program.

The survey results for Child 2 coincided with those of Child 1 and also indicated that improvements were made in their social skills. The parent’s opinions of their child’s social skills reported that they noted increases in the frequency of use of these social skills. These results also supported the notion that the summer camp improved their child’s social abilities and that their reasoning for sending him to camp was justified. They stated that their child was “better able to socialize at home with neighbor children” and that pronoun use and language had also improved.

These survey results for both Child 1 and Child 2 matched the results found in the data collection. The data showed improvements in Child 1’s social skill of request for objects and actions by 50% and in Child 2’s social skill of request for objects and actions by 10%. The parents of both children also reported increases in their child’s social skill abilities.
In conclusion, summer camp programs appeared to be effective at improving social skills in children with autism as hypothesized. Based on the researchers’ findings and parent perceptions in the present study, ongoing therapy could be helpful in improving and retaining children’s social abilities. An environment where other children were present may allow comfort and security. The findings in this present study displayed that Child 1 of the clinical camp program showed a better improvement based on the percentage increase in the number of requests made from baseline to the end of camp. Also, Child 1 showed a better expansion in the types of requests made and the communication partner that these requests were directed towards. This supported the researcher’s hypothesis that the clinical camp setting would be more beneficial in improving the social skill of requesting objects or actions. However, both programs increased the children’s social capabilities in some way, suggesting that both types of programs may be effective. This led the researcher’s to predict that a summer camp program in a clinical setting held daily might actually be the most effective program in improving social skills in children with ASD.

CONCLUSION

In summary, the results of this study indicated that each child observed showed an increase in the number of times objects or actions were requested over baseline data. Survey responses from the parents showed satisfaction in their child’s social abilities after the completion of both camps. This in turn shows that interventions that address social skills can be important during the summer months to provide opportunities to increase children’s abilities to use social skills. The results suggested that the clinical setting may be more beneficial at improving requests for an action or object, most likely because of its use of direct instruction during therapy. The presence of peers was likely an essential component to increasing social
skills as well, making both camp environments successful in improving social skills in the children observed. Daily one on one therapy allowed for more comfort and familiarity, causing Child 2’s social skills to increase.

SUGGESTIONS FOR FUTURE RESEARCH

In order to expand on the findings of this research, future research on the effectiveness of summer social skill camps for children with autism should be conducted. Future research should include a larger sample size and use random selection rather than convenience sampling to ensure more accurate results. Also, researchers should record how many opportunities each child had for requests rather than only noting the requests they actually made. This information could prove useful in analyzing each camp’s effectiveness. Finally, future researchers should provide a control group of children who meet the same criteria but do not receive any help with social skills throughout the summer. This could be used to compare data and more definitively determine whether summer camps improved social skills.
References


Appendix A

Pre-test Survey

Please fill out this survey to the best of your abilities. A request for an object or an action, as defined in this study, is any time the child initiates a request of another. For example, this could be done by the child asking to join in an activity or requesting a toy that they want to play with. In addition, when you come to questions with a scale of 1 to 7 please use the scale below as a reference.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Somewhat Disagree</td>
<td>Neutral</td>
<td>Somewhat Agree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

1. Why did you enroll your child in this summer camp program?

2. I expect this camp program to improve my child’s social skills.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Somewhat Disagree</td>
<td>Neutral</td>
<td>Somewhat Agree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

3. When my child wants an object or an action to occur, they can ask for it. For example, if my child wants more juice, they will verbally ask for it. Also, if my child wants to play with another child, they are able to approach the child and ask if they want to play.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Somewhat Disagree</td>
<td>Neutral</td>
<td>Somewhat Agree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

4. My child is able to request an object or action in different settings. For example, they request objects at home, on the playground, etc.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Somewhat Disagree</td>
<td>Neutral</td>
<td>Somewhat Agree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

5. How does your child request an object or action?

6. At this point, how many times on average does your child request an object in a day? _________

7. At this point, how many times on average does your child request an action to occur in a day? _________

Please feel free to add any additional comments you may have here.
First Post-Test Survey

Please fill out this survey to the best of your abilities. A request for an object or an action, as defined in this study, is any time the child initiates a request of another. For example, this could be done by the child asking to join in an activity or requesting a toy that they want to play with. In addition, when you come to questions with a scale of 1 to 7 please use the scale below as a reference.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Somewhat Disagree</td>
<td>Neutral</td>
<td>Somewhat Agree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

1. When compared to the beginning of the summer camp program, my child has improved their social skills in requesting for an object or action.

   1  2  3  4  5  6  7

   How so? What improvements have you seen?

2. The summer camp program met my expectations regarding my child’s social skills.

   1  2  3  4  5  6  7

   Why or why not?

3. When my child wants an object or an action to occur, they can ask for it. For example, if my child wants more juice, they will verbally ask for it. Also, if my child wants to play with another child, they are able to approach the child and ask if they want to play.

   1  2  3  4  5  6  7

4. How does your child request an object or action?

5. At this point, how many times on average does your child request an object in a day? ________

6. At this point, how many times on average does your child request an action to occur in a day? ________

Please feel free to add any additional comments you may have here.
Appendix C

Second Post-Test Survey

Please fill out this survey to the best of your abilities. A request for an object or an action, as defined in this study, is any time the child initiates a request of another. For example, this could be done by the child asking to join in an activity or requesting a toy that they want to play with. In addition, when you come to questions with a scale of 1 to 7 please use the scale below as a reference.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Somewhat Disagree</td>
<td>Neutral</td>
<td>Somewhat Agree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

1. My child’s improvements in the social skill of requesting an object or action have been maintained since the conclusion of the summer camp program.

   1   2   3   4   5   6   7

2. When my child wants an object or an action to occur, they can ask for it. For example, if my child wants more juice, they will verbally ask for it. Also, if my child wants to play with another child, they are able to approach the child and ask if they want to play.

   1   2   3   4   5   6   7

3. How does your child request an object or action?

4. At this point, how many times on average does your child request an object in a day? _________

5. At this point, how many times on average does your child request an action to occur in a day? _________

Please feel free to add any additional comments you may have here.
Appendix D

Release of Information Form

To Whom It May Concern:

Two University of Akron students in the Department of Speech-Language Pathology, Julie Sandish and Kelly Brown, have asked this camp to help them in a research study entitled “The Efficacy of Summer Camp Programs in Improving Social Skills for Children with Autism.” The attached letter is from these two students describing their research study in more detail.

We are contacting you because your child meets the criteria for the participants in their study (male, ages 8-17, and mild to moderate level of autism). Before any information can be released to these students, we are asking for your permission.

If you choose to sign this form, this does not mean you are agreeing for your child to participate, only that you are granting permission for these students to contact you about your child’s potential participation.

By signing this form, I allow my child’s age, gender, and level on the autism spectrum to be released to these students. I also give permission for my personal contact information to be released so these students may contact me directly regarding this study.

_________________________________  ______________________________
Parent / Legal Guardian Signature                           Date

_________________________________  ______________________________
Parent / Legal Guardian Signature                           Date
To Whom It May Concern:

Your child is invited to participate in a research project that is being conducted at this camp by Julie Sandish and Kelly Brown, students in the Department of Speech-Language Pathology at The University of Akron. The title of our study is “The Efficacy of Summer Camp Programs in Improving Social Skills for Children with Autism.”

This study aims to examine two types of summer camp programs, one being a weekly camp in a clinical environment and the other a daily camp in a more relaxed “camp” atmosphere. We plan to examine the effectiveness of each program individually on social skills by observing the specific social skill of request for an object or action in your child. We will then see if this skill carries over into the children’s behavior upon their return to school in the fall. We will select one child from each camp to participate in our research.

If chosen, your child would simply participate in the normal camp activities as we observe the social skill that we are studying. We would not ask your child to do anything besides the typical camp requirements. At certain points in the summer, we would also be asking you to fill out a short survey of your opinions. All information would all be recorded anonymously. Because we are both volunteers/employees of these camps, some personal interaction with your child would be likely. Only the information gathered through observation would be used for the purpose of our study.

We would really appreciate your consideration of your child’s participation in this research study as his/her participation may help us better understand the effectiveness of summer camp programs on improving social skills for children with autism. Again, we stress that no personal information would be recorded and only your child’s age, gender, and level on the autism spectrum would be used.

If you are interested and would like additional information before releasing information to us, please feel free to contact Julie at jas200@zips.uakron.edu or Kelly at kjb42@zips.uakron.edu. If you agree to release your information to us by signing the attached form, we will be contacting you to provide you with more information about our study.

Thanks for your consideration,

Julie Sandish

Kelly Brown
Title of Study: The Efficacy of Summer Camp Programs in Improving Social Skills for Children with Autism

Introduction: Your child is invited to participate in a research project that is being conducted at this camp by Julie Sandish and Kelly Brown, students in the Department of Speech-Language Pathology at The University of Akron.

Purpose: This study aims to examine two types of summer camp programs, one being a weekly camp in a clinical environment and the other a daily camp in a more relaxed “camp” atmosphere. We plan to examine the effectiveness of each program individually on social skills by observing the specific social skill of request for an object or action in your child. We will then see if this skill carries over into the children’s behavior upon their return to school in the fall. We have selected one child from each camp to participate in our research.

Procedures: Your child will simply participate in the normal camp activities as we observe the social skill that we are studying. We will not ask your child to do anything besides the typical camp requirements. At certain points in the summer, we will also be asking you to fill out a short survey of your opinions. This information will all be recorded anonymously and will only be used to supplement our data. Because we are both volunteers/employees of these camps, some personal interaction with your child will be likely. Only the information gathered through observation will be used for the purpose of our study.

Risks and Discomforts: The research being conducted will pose no risk to your child, as we will only be observing and recording findings.

Benefits: Your child will receive no direct benefit from participation in this study, but his/her participation may help us better understand the effectiveness of summer camp programs on improving social skills for children with autism.

Right to Refuse or Withdraw: Following your consent, participation of your child in this study remains voluntary. Your child will also be asked to provide assent to participate and may refuse even if you consent. Your child can also withdraw from the study at any time without penalty.

Confidential Data Collection: Data collection will be confidential. No identifying information will be included in the data we collect about your child. Your signed consent form, and their assent form, will be kept separate from the data, and nobody will be able to link their information to them.

Confidentiality of records: In our research, we will use your child’s age, gender, and level of autism, but no personal information, including their name, will be stated or recorded that might link them to this research project. All consent forms will be kept secure and separate until the end of the study when they will be disposed of.

Who to contact with questions: If you have any questions about this study, you may call Julie Sandish at 440-829-1054 or Kelly Brown at 419-202-6077 or Dr. Charles Carlin at 330-972-6803. This project has been reviewed and approved by The University of Akron Institutional Review Board. If you have any questions about your rights as a research participant, you may call the IRB at (330) 972-7666.

Acceptance & signature: I have read the information provided above and all of my questions have been answered. I voluntarily agree to the participation of my child in this study. I will receive a copy of this consent form for my information.

__________________________________________________________
Parent / Legal Guardian Signature
Date

__________________________________________________________
Parent / Legal Guardian Signature
Date

Name of Child ________________________________
Appendix G

Assent Form for Children under 18

The Efficacy of Summer Camp Programs in Improving Social Skills for Children with Autism

1. Our names are Julie Sandish and Kelly Brown. We are students in the Department of Speech-Language Pathology at The University of Akron.

2. We are asking you to take part in a research study because we are trying to learn more about summer camp programs and if they help children to improve certain social skills.

3. If you agree to be in this study we will be observing you as you participate in your normal camp activities.

4. This research will cause you no risk or harm.

5. You will receive no direct benefits from this research, but your participation will help our research.

6. Please talk this over with your parents before you decide whether or not to participate. I will also ask your parents to give their permission for you to take part in this study. But even if your parents say “yes” you can still decide not to do this.

7. If you don’t want to be in this study, you don’t have to participate. Remember, being in this study is up to you and no one will be upset if you don’t want to participate or even if you change your mind later and want to stop.

8. You can ask any questions that you have about the study. If you have a question later that you didn’t think of now, you can call Julie at 440-829-1054 or Kelly at 419-202-6077.

9. Signing your name at the bottom means that you agree to be in this study. You will be given a copy of this form to keep.

__________________________________________  __________
Name of Subject  Age
__________________________________________  _______________________
Signature  Date