Parents’ Perceptions of the Philly Goat Project’s All Abilities RAMble: A Qualitative Study of Animal-Assisted Intervention for Intellectual and Developmental Disorders

Patricia Flaherty-Fischette
*Bryn Mawr College Graduate School of Social Work and Social Research*

Jenée Lee
*Virginia Commonwealth University School of Social Work*

Yvonne D’Uva-Howard
*Philly Goat Project; Salus University College of Health Sciences, Education, and Rehabilitation*

Elizabeth P. Cramer
*Virginia Commonwealth University School of Social Work*

Karen Krivit
*Philly Goat Project*

Follow this and additional works at: [https://digitalcommons.usu.edu/ddnj](https://digitalcommons.usu.edu/ddnj)

Recommended Citation
Available at: [https://digitalcommons.usu.edu/ddnj/vol3/iss2/11](https://digitalcommons.usu.edu/ddnj/vol3/iss2/11)

This Article is brought to you for free and open access by the Journals at DigitalCommons@USU. It has been accepted for inclusion in Developmental Disabilities Network Journal by an authorized administrator of DigitalCommons@USU. For more information, please contact digitalcommons@usu.edu.
Parents’ Perceptions of the Philly Goat Project’s All Abilities RAMble: A Qualitative Study of Animal-Assisted Intervention for Intellectual and Developmental Disorders

Cover Page Footnote
We have no conflicts of interest to disclose. Correspondence concerning this article should be address to Patricia Flaherty-Fischette. Email: pattyffphd@gmail.com. Patricia Flaherty-Fischette (co-Principal Investigator), PhD, LCSW, Director of Clinical Practices at Carousel Connections, and adjunct professor and research associate, Bryn Mawr Graduate School of Social Work and Social Research Jenée Lee (Research Assistant), MSW, Doctoral Student, Virginia Commonwealth University School of Social Work Yvonne D’Uva-Howard (Research Team) Philly Goat Project Consultant; Salus University College of Health Sciences, Education, and Rehabilitation Elizabeth P. Cramer (Principal Investigator), PhD, LCSW, Professor, Virginia Commonwealth University School of Social Work Karen Krivit (Research Team) Director of Philly Goat Project Sarah Meehan (Research Assistant), MSW Student (now Graduate), Virginia Commonwealth University School of Social Work

Authors
Patricia Flaherty-Fischette, Jenée Lee, Yvonne D’Uva-Howard, Elizabeth P. Cramer, Karen Krivit, and Sarah Meehan

This article is available in Developmental Disabilities Network Journal: https://digitalcommons.usu.edu/ddnj/vol3/iss2/11
Parents’ Perceptions of the Philly Goat Project’s All Abilities RAMble: A Qualitative Study of Animal-Assisted Intervention for Intellectual and Developmental Disorders

Patricia Flaherty-Fischette,1 Jenée Lee,2 Yvonne D’Uva-Howard,3 Elizabeth P. Cramer,2 Karen Krivit,4 and Sarah Meehan2

1Bryn Mawr College, Bryn Mawr, PA
2Virginia Commonwealth University, Richmond, VA
3Salus University, Elkins Park, PA
4Philly Goat Project, Philadelphia, PA

Plain Language Summary

Individuals with intellectual and developmental disabilities (I/DD) are a growing population. There are many therapies used to support individuals with I/DD. Traditional therapies can be expensive, time consuming, and lack a sense of community. Animal-Assisted Interventions (AAI) are creative and nontraditional treatments. AAI offers treatment options for many populations, including individuals with I/DD. The Philly Goat Project (PGP) offers the All Abilities RAMble. The All Abilities RAMble is a goat-assisted therapeutic activity for children with disabilities. This study explored the experience of 23 children who participated in the RAMble. We interviewed 19 parents of children who participated in the RAMble. We found five themes. The first theme is that the RAMble activates joy. The second theme is the RAMble is a place to practice skills. The third theme is the RAMble is a unique service and offers skills the child can use in different settings. The fourth theme is the RAMble offers personal treatment. The fifth theme is the RAMble builds community. There is a need to explore more goat-assisted therapies for individuals with I/DD. Future research should consider the family’s experience at the RAMble.

Abstract

Individuals with intellectual and developmental disabilities (I/DD) are a growing population. Considering the wide diversity in I/DD and the financial burden of traditional treatment modalities, Animal-Assisted Interventions (AAI) has emerged as an innovative and nontraditional treatment for individuals with a range of disabilities, including individuals with I/DD. To the authors’ knowledge, the present study was one of the first to explore a goat-assisted therapy experience for children with I/DD. This study explored the experiences of 23 children with the All Abilities RAMble—a goat-assisted therapeutic activity offered by the Philly Goat Project (PGP). Key themes in our study included the...
**Introduction**

Developmental disorders, also known as intellectual and developmental disabilities (I/DD), are broadly defined as a group of severe, chronic disabilities that first present during childhood (American Psychiatric Association, 2013). Scientists from the Centers for Disease Control and Prevention (CDC) and the Health Resources and Services Administration (HRSA) found that 17% of children aged 3–17 years old have a developmental disability and that this percentage increased over the two time periods compared—2009–2011 and 2015–2017 (Zablotsky et al., 2019). In Philadelphia, Pennsylvania, 15% of people are living with an I/DD (Department of Behavioral Health and Intellectual disAbility Services, n.d.). Common developmental disorders include attention-deficit hyperactivity disorder (ADHD), autism spectrum disorder (ASD), cerebral palsy, hearing loss, motor disorders, intellectual disability, learning disorders, and vision impairment (Boyle et al., 2011). The variability in symptoms, comorbidities, financial impact of therapies, and the barrage of treatments can create significant stress for both the individual and the individual’s family system. Considering the variability in developmental disorders, the increase in prevalence, and the financial impact of traditional treatment modalities, Animal-Assisted Interventions (AAI) has emerged as an innovative and non-traditional treatment for individuals with a range of disabilities, including individuals with developmental disorders (O’Haire, 2013).

**Animal-Assisted Interventions (AAI)**

There is growing momentum in research and clinical practice related to the inclusion of animals in a broad range of intervention services, particularly those for ASD (O’Haire, 2017), cerebral palsy (Sterba et al., 2002), post-traumatic stress disorder (Rodriguez et al., 2020), Alzheimer’s disease (Pope et al., 2019), and depression (Hunt et al., 1992; Wood et al., 2005). Integration of animals into therapeutic programming is known as AAI and is comprised of three categories: targeted therapeutic services (Animal-Assisted Therapy [AAT]), enrichment visits (Animal-Assisted Activities [AAA]), and educational programs (Animal-Assisted Education [AAE]; Fine et al., 2015).
AAA is an informal and goal-oriented visitation conducted by a human-animal team for motivational, recreational, and/or educational purposes (Fine, 2018; International Association of Human-Animal Interaction Organizations [IAHAIO], 2018). An example of an AAA is visiting companion animals with residents in nursing homes (IAHAIO, 2014, 2018). AAE is a goal-oriented, structured, and planned intervention delivered by an educational service professional (IAHAIO, 2018). An example of an AAE would be a dog-assisted reading program delivered by a special education teacher (IAHAIO, 2018). Last, AAT is a goal-oriented, planned, and structured therapeutic intervention directed and/or delivered by education, health, and human service professionals (Fine, 2018; IAHAIO, 2018). The treatment providers guide interactions between a patient and an animal to achieve specific goals (IAHAIO, 2018). A wide variety of disciplines may incorporate AAT. Possible practitioners could include physicians, occupational therapists, physical therapists, certified therapeutic recreation specialists, nurses, social workers, speech therapists, or mental health professionals (Kruger & Serpell, 2006). Examples of AAT include animal-assisted psychotherapy, animal-assisted social work, animal-assisted physical therapy, and animal-assisted speech therapy (Fine, 2018).

AAI and Human-Animal Interaction Theories

Human-Animal Interaction (HAI) refers to the mutual and dynamic relationships between people and animals and the ways in which these interactions may affect physical and psychological health and well-being (McCardle et al., 2011). The theoretical construct of HAI proposes that animals can support humans in the de- arousal of anxiety, mediate social stress, regulate affect and emotion, and improve self-efficacy (Beetz, 2017; McCardle et al., 2011; Souter & Miller, 2007). These theoretical underpinnings have spurred a growing field of inquiry into the practice of AAI.

HAI theory suggests that animals may provide safety, comfort, and enhance social support for individuals (Beetz, 2017; McCardle et al., 2011; O’Haire, 2013). In addition, HAI attachment theory suggests the animals may act as transitional objects that may reduce problematic behaviors and decrease distress in children (O’Haire, 2013). Through the lens of HAI social support theory, animals can provide both indirect (as a facilitator of human interactions) and direct (as a source of comfort) support for children (O’Haire, 2013; Parish-Plass, 2008).

AAI and I/DD

Individuals with I/DD have variability in symptoms, but many of their vulnerabilities impact their social connections and experience of stress (American Psychiatric Association, 2013). While the level of social challenges may differ for each individual, social challenges often include difficulty engaging in social interactions and forming social relationships (Jobe & White, 2007). The presence of animals has been linked to increased social interaction for vulnerable communities (Fine, 2018; Wood et al., 2005). The animals may act as a social facilitator to connect individuals with I/DD to people around them, and prompt social interactions far beyond other traditional objects of engagement such as toys (O’Haire, 2017; Sams et al., 2006). Moreover, individuals with I/DD may lack peer interaction, and animals can provide an appealing motivator.
for individuals to connect and practice social interactions in a naturalistic and less-threatening environment (O’Haire, 2013).

Animals also have an ability to influence human psychobiology via stress reduction in social situations (Beetz, 2017). When faced with social isolation or exclusion, people tend to have lower stress levels if an animal is present, compared to a human companion (Polheber & Matchock, 2014). The presence of an animal may ameliorate some feelings of social stress by acting as a positive focus of attention and social buffer (Fine, 2018). While specific to ASD, recent neurobiological evidence suggests that children with ASD may perceive greater social reward from animal faces, compared to human faces, as indicated by greater activation in brain regions related to reward and emotional arousal such as the amygdala and putamen (Whyte et al., 2016). For individuals with vulnerabilities in social skills, face-to-face interactions with animals may be more appealing and less threatening than those with humans alone (Solomon, 2012).

AAI, I/DD, and Goats: Why Goats?

There has been a burgeoning amount of research exploring AAI with companion animals and equines, but the research is extremely limited on forms of AAI with goats. Goats present several unique characteristics that make them good candidates for AAI opportunities both generally and specifically with individuals with I/DD.

Goats are explorative, curious, playful, expressive (using both acoustic and body expressions), and have an impressive long-term memory (Briefer et al., 2014; Celozzi et al., 2022; Langbein et al., 2007; Nawroth et al., 2018; Scholl et al., 2008). Research on goats’ cognitive abilities suggests that goats understand their physical and social environment and have several socio-cognitive abilities that affect their interactions with humans (Nawroth, 2017; Nawroth et al., 2018; Nawroth & McElligott, 2017). In addition, goats are sensitive to human facial expressions, can learn skills from humans, and can adapt their behavior based on the surrounding environment (Celozzi et al., 2022; Kaminski et al., 2005; Nawroth et al., 2018).

Specific to the needs of individuals with I/DD, goats prefer to be part of a group and their herd behavior may offer opportunities for individuals to learn about social group dynamics in a less threatening way than with humans (Philly Goat Project [PGP], n.d.; Nawroth, 2017). Furthermore, there has been research demonstrating that goats can successfully interpret visual signals and physical cues from humans, such as body posture and head orientation, and are sensitive to subtle cues such as facial expressions and open eyes (Celozzi et al., 2022). This may translate into a more responsive interaction with children and the goat’s ability to recognize their physical presentation. For individuals and children with I/DD, they may benefit from the goat’s expressiveness as a way to practice emotion recognition (Koda et al., 2016).

Philly Goat Project (PGP) and PGP’s All Abilities RAMble

The Philly Goat Project (PGP) is a non-profit organization housed at an arboretum in an under-resourced neighborhood of Philadelphia, Pennsylvania. Karen Krivit, the creator and
director of the PGP, is a social worker who has been in the field of disabilities and trauma for over 30 years. Ms. Krivit established the PGP to address the need for supportive programming to buffer the long-term effects of toxic stress and adverse childhood experiences, while also considering intergenerational access to supportive relationships, nature, physical activity, and mindfulness practice. PGP provides AAT, wellness events, environmental and educational experiences, and community engagement opportunities across many environments (e.g., parks, schools, and libraries), and has engaged over 700,000 people in goat-centered activities in the greater Philadelphia region (PGP, n.d.).

One of the programs at PGP is the All Abilities RAMble. The RAMble is a free monthly event which provides an inclusive and sensory-friendly experience for individuals with disabilities and their families within a structured person-centered program. Operating from a trauma-informed model, PGP’s RAMble has an intentional and person-centered process, which includes a pre-registration phone-call with the PGP Coordinator prior to goat-assisted activity, preplanning with staff based on individual’s needs, extensive training protocols for goats and handlers, intentional selection of goat(s), training of staff for subsequent goat-assisted experience(s), intentional opportunities for participant to have choice(s) and structure, engagement of caretakers in the experience with the participant, and pre and post-experience de-briefing to review experience(s).

Study Purpose

There have been very few evaluations of goat therapy with individuals with disabilities, and the study results will contribute to the nascent literature base in this area. Given the lack of literature on goat-assisted therapy with children with disabilities, research is needed to explore goat-assisted therapeutic activities for children with I/DD and build the empirical support for goat-assisted therapeutic activities. The purpose of this study was to explore the experiences of children with disabilities at the All Abilities RAMble program. This exploratory study aimed to better understand the experiences of children with disabilities at the RAMble through the lens of a caregiver with the following research question: “What are the family members’ perceptions of the experiences of their children with disabilities at the All Abilities RAMble”?

Methods

Research Design Overview

To address our research question, we used a constructivist qualitative research design, which assumes that meaning is subjective, different for everyone, and human phenomena are socially structured rather than objectively real (Charmaz, 2006; Denzin & Lincoln, 2005; Padgett, 2008). Qualitative research is often correlated with constructivist theories because the methods assume there can be multiple truths or viewpoints about the same phenomenon (Creswell & Plano Clark, 2018). We gathered data using semistructured interviews. Next, we systematically analyzed our findings using descriptive and InVivo coding (Saldaña, 2016). Descriptive coding
assists specific labels to data to summarize with short phrase(s) or word(s), and InVivo coding uses a short phase from the actual language found in the qualitative data record, “the terms used by [participants] themselves” (Strauss, 1987, p. 33). After coding cycles, we analyzed the data using thematic analysis, a common form of analysis within qualitative research that facilitates identification and interpretation of themes within the data (Braun & Clark, 2006). Through our analysis, themes emerged that provide insight into a family’s perception(s) of their child’s experience of the All Abilities RAMble.

Study Team

This community engaged-research study included a collective of professionals with experiences with AAI, I/DD, and experience with PGP. The PGP team was part of the process from conceptualization and an active contributor throughout the study. The research team included the Principal Investigator (PI) (Professor of Social Work Virginia Commonwealth University [VCU] School of Social Work), Co-Principal Investigator (Research Associate & Lecturer of Bryn Mawr College Graduate School of Social Work and Social Research), two graduate research assistants from VCU School of Social Work, and PGP’s team (PGP Director and PGP Speech-Language Pathology Consultant). The PI developed and revised the interview guide with consultation from the larger research team, and the graduate research assistants conducted all the interviews.

Study Participants

A convenience sample was employed, consisting of English-speaking parents who had a child or children that attended an All Abilities RAMble event at least once in April or May, 2022. At least half of the youth with disabilities who attend the RAMble do not communicate verbally and would not have the capacity to answer questions about their experiences; therefore, adult family members were the participants in the study. All 19 participants in the study identified themselves as a parent. Across all the participants, there were a total of 23 children with disabilities (see below for full list) with a range of ages 2 to 18 years old. While attending one RAMble event was required for participation, the range of attendance was diverse, with children attending as few as two times and as many as 11 times. The participants and interviewers had no relationship prior to the interview.

Children’s Disabilities Reported by Parent Participants

- ADHD
- Autism
- Behavioral Challenges
- Blind/Visual Disabilities
- Cerebral Palsy
- Coordination Disorders
- Deaf/Hard of Hearing
- Down Syndrome
- Epilepsy
- Expressive Speech Delay
- Feeding problems
- Global Delay
- Intellectual Disabilities
- Learning specific disabilities
- Sensory Processing Disorder
- Severe Anxiety
- Speech and language disabilities
- Traumatic Brain Injury
- Other genetic disorders
- Other Medical Condition
Participant Recruitment

We recruited families through the PGP’s internal registration for the April 2022 and May 2022 All Abilities RAMble. The PGP Director, Ms. Krivit, contacted families registered for the April and May RAMble event(s) and used an Institutional Review Board (IRB)-approved script to share information about the research study. Interested participants provided consent for Ms. Krivit to share their contact information with the research assistants. The research assistants contacted interested participants via email or phone with more details of the study and specific interview dates. Twenty-five participants expressed interest in the study and agreed to a phone interview. The research assistants sent email invitations to confirm the date and time of the scheduled interviews. All invitations included the research assistant who would interview the parent and the research assistant’s phone number being used for the interview.

Participants did not receive incentives or compensation for their participation in the research. In protection of the participants, the study was approved by the IRB at VCU and subsequently monitored by the IRB at Bryn Mawr College with an annual check-in. Prior to the interview, the research assistant (interviewer) read the informed consent sheet to the participant and asked if the person agreed or declined to be interviewed. Verbal consent was obtained before beginning all the interviews.

Since this was an exploratory study with the goal of adding to an extremely limited knowledge base of goat-assisted therapy, recruiting focused on saturation and respect for the families navigating complicated lives. If a participant missed an agreed upon interview time, they were contacted to reschedule once or twice before ceasing contact. This determination was made in consultation with the PGP Director who has considerable experience(s) with the stressors for this population. A total of 19 participants were interviewed for the study with a response rate of 76%.

Research Instrument/Protocol and Data Collection

We conducted semistructured phone interviews in English to understand the experiences of children at the monthly All Abilities RAMble. The interview guide was developed by the PI, Co-PI, and the larger research team with expertise in the RAMble, Animal-Assisted Interventions, I/DD, and qualitative research. All interviews were conducted by the two research assistants, on the phone, and in a private location. The interview guide began with four demographic questions: “Approximately how many times has your child/family member been to All Abilities Ramble,” “What is your child/family member’s age,” “What disability or disabilities does your child/family member have?” and, “What is your and your child/family member’s race/ethnicity?” Participants were asked five open-ended questions (see Table 1) focused on three main categories related to their child’s experience of RAMble. The questions focused on these three categories: (1) how the RAMble is different from other interventions or therapies; (2) the experience of learning or skill acquisition at the RAMble; (3) the overall experience of the RAMble. The duration of the interviews ranged from 5 minutes 57 seconds (shortest) to 20 minutes and 25 seconds (longest). Field notes and memos were taken both during and after the interviews for additional context.
and reflection. The interviews were simultaneously recorded with prior permission from the participants by an online recording and transcription site, Otter.ai. The interviews were reviewed by the PI and research assistants for accuracy with the original audio recordings of the interviews. After review, the transcriptions were loaded into a qualitative data analysis program (Dedoose) for analysis and all recordings were deleted off the Otter.ai server. All names and identifiable information were changed or removed from the transcripts. The research assistants de-identified each interview and gave participants pseudonyms based on PGP goats and famous people from Philadelphia in no particular order.

Table 1

<table>
<thead>
<tr>
<th>Interview Guide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic questions</td>
</tr>
<tr>
<td>1. Approximately how many times has your child/ family member been to All Abilities RAMble?</td>
</tr>
<tr>
<td>2. What is your child/family member’s age?</td>
</tr>
<tr>
<td>3. What disability or disabilities does your child/family member have?</td>
</tr>
<tr>
<td>4. What is your and your child/family member’s race/ethnicity?</td>
</tr>
<tr>
<td>5. Are there other outdoor spaces where you are able to regularly take your child/family member where other children with disabilities are at and where they could also practice a skill?</td>
</tr>
<tr>
<td>5. Are there other outdoor spaces where you are able to regularly take your child/family member where other children with disabilities are at and where they could also practice a skill?</td>
</tr>
</tbody>
</table>

Data Analysis

We used a constructivist framework to explore the experiences of children with disabilities who attended the RAMble (Charmaz, 2006; Padget, 2008). Consistent with the epistemological approach of constructivism, InVivo and Descriptive Coding were used in the analysis process (Charmaz, 2006). Thematic analysis was used to identify, analyze, and report
themes within the interview data (Saldaña, 2016).

Analysis of transcripts included a rigorous coding process with reliability measures. The research assistants read and coded each transcript using both descriptive and InVivo codes. Through further analysis of the first cycle codes, themes summarizing main ideas and experiences of the children emerged (Creswell, 2013; Padget, 2008). The research assistants incorporated credibility measures into the analysis process to ensure the trustworthiness of the findings. One measure was investigator triangulation, or use of multiple investigators (two research assistants and PI), to analyze the data. The PI acted as a consultant to review all codes from an objective lens and shared her feedback with the research assistants. The research assistants wrote memos in the Qualitative Software Analysis program, Dedoose, for short reflections, identification of bias(es), emergence of themes, and communication with each other and the PI. Within the memos, there were links to specific quotations and notes from the research team members. The research assistants shared their ideas within Dedoose and recorded audit trails to make the analysis transparent. Thick descriptions that relied on the participants’ actual words were used as frequently as possible to provide evidence for the research assistants’ interpretations (Merriam & Tisdell, 2016). Additionally, research assistants followed up with specific families for member-checking to address inconsistencies in the audio of phone recordings.

Results

Participant Characteristics

Nineteen English-speaking parents of 23 children with disabilities were interviewed to discuss their perceptions of their child or children’s experience of the All Abilities RAMble. The ages of children ranged from 2 to 18. A few parents indicated they had two children with disabilities who both attended the RAMble. The participants identified the race of their child or children, and identified them as Caucasian/White (52%), Black or African-American (26%), Mixed Race (26%), and Hispanic (4%). Although many of the children were diagnosed with one or more developmental disabilities, more than half of the children (52%) were diagnosed with ASD. A full list of disabilities was provided in a previous section of the article.

Themes

After two cycles of coding using a constructivist approach, the data emerged into five main themes: (1) RAMble activates joy; (2) RAMble is a unique service, more beneficial than other services; (3) RAMble is a program that offers personalization and is child-directed; (4) RAMble is a place where children with disabilities can learn and practice skills; and (5) RAMble is a program that offers a sense of community.

**RAMble Activates Joy**

Several parents described their child’s experience at the RAMble as positive and used the
word “joy.” Children who attended the RAMble talked about their interactions with the goats and looked forward to taking part in walking, feeding, and petting the animals during the events. Participant “Claire,” a parent of a child with multiple disabilities, described her child’s feelings towards the monthly events, and said,

She is always excited to go. She feels very comfortable with having the goats there to watch their behaviors- to talk to them. She enjoys grooming them. She loves it when there’s treats available to feed the goats to have that interaction with them and she has seen some of the volunteers use the food and ways to teach the goats tricks....It brings her a lot of joy to be there.

Additionally, parents talked about the joy their children experienced participating in a program geared towards children with disabilities. “Annie,” a parent of a child with a motor disorder, talked about this joy in her interview. She was a little apprehensive prior to her child’s first RAMble and was unsure how her son would react in this setting. She said,

The first time we attached one of his seating chairs into...one of those red wagons that were hooked up to a goat...they...pulled him through in the wagon ...it was the most joy I’ve ever seen from him.

**RAMble as a Unique Service and Offers Transferable Skills**

Many parents used multiple services to help their child with a developmental disability build communication, sensory, and social skills. When talking about the therapeutic services their children received in their treatment, parents differentiated the RAMble as a unique service and different from the other services. Parents shared that the RAMble provided opportunities for their children to learn skills that may be more transferable across different settings and contexts. “Landon,” a parent of a child who attended the RAMble two times, said,

It is just really refreshing to see a new take on you know, ways to implement therapy...our kids...they in their different therapy services, they use toys, they use bubbles, and it’s always kind of the same thing. But...the goats are really unique, and it gives them more of a hands-on approach to things that they will be able to use in their life. They are only going to play with bubbles and toys for so long, but their love for animals [is] ongoing.

“Ivy,” a parent of a child with dyspraxia, shared that the RAMble provided both a topic of communication for her child and a way to connect with one of his team members outside of PGP, “He gets the most out of sharing his experience with his speech and language pathologist, the session after because he always wants to talk with them about the goats.”

“Claire” also mentioned how the Ramble helped her child with communicating,

I know the RAMble itself helps her introduce a conversation with people in her life like her teachers and some of the peers that she may interact with...socially. [She] takes the experiences of the RAMbles and uses that as like opening
dialogue for a conversation.

**Personalization and Child-Directed**

Compared to other therapeutic services, parents noted that the personalization of the RAMble and the ability for activities to be child-directed made the program distinctive. The majority of participants (79%) discussed personalization in the RAMble as a benefit of the program. The volunteers and staff working in the events knew their children by name. These personalization efforts made the space feel safe and helped children who preferred routines and familiarity. “Patti,” a parent of a child with autism, spoke to this personalization during their daughter’s experience, and shared,

*The volunteers did an awesome job of meeting her where she was at and not pushing her to do something that she wasn’t ready for…. She had times she was a little overwhelmed by her excitement…the volunteers were able to just sort of help her, dial it back down to a level where she was able to function and have fun.*

Other parents shared a similar sentiment by describing the RAMble as *organized but unstructured* to allow for each child to be met exactly where they were in their abilities. “Oliver,” a parent of two children attending the RAMble events noted,

*There aren’t things that they’re required to do, and they don’t feel the stress and the pressure of doing things that they’re asked to do…it’s something that’s very much tailored to them.*

“Joy,” a parent of a child with autism, described their child’s ability to have choices at the RAMble as “the biggest form of self-empowerment he got.”

**RAMble as a Place to Practice Skills**

Seventeen of the 19 parents (89%) indicated that their child practiced or gained skills while participating in the RAMble. Communication skills were mentioned the most by participants. Specifically, the RAMble provided opportunities to practice using language, which improved initiating conversation and functional conversation. “Joy” shared,

*He knows if he wants to do something, or if he doesn’t want to do something, he knows how to communicate that…he uses his words more now…he can actually communicate in some effective way…he has built certain confidence with using his words right verbally. He’s in command of his voice.*

Confidence was described as an area of growth after experience practicing skills through the RAMble. Another parent, Ray, with two kids with disabilities attending the RAMble, speaking specifically about his child who does not receive as much individualized support, said,

*He’s able to relay…back to me and to other people, what he does and how he*
contributes to it. I think he can say it’s his activity... and that he just takes care of the goats and he is very proud of himself.

Another parent described the RAMble as a place where her child thrived,

*It’s a place where her ability can shine... where her abilities just pour out of her naturally... you get the real [child’s name] of who she hides when she’s in the places where it’s more challenging and intimidating.*

A Sense of Community

Many parents talked about the RAMble providing a sense of community for their children. “Andi,” a parent of a child with an intellectual disability stated,

*He’s in an environment where there are other children with disabilities as well as [child’s name] and share...some of the same needs and strengths and he’s able to socialize and interact with other children with disabilities and feel like a part of a community.*

“Ray” also discussed how the overall treatment of the family system led to fostering a sense of community,

*Me and my family feel so welcome there...we go in there...we’re not a number... and so for him [child’s name], it makes him feel like he’s a part of something.*

Beyond the children finding community in this space, parents also expressed a sense of community. In other spaces, one parent described feeling invisible, but coming into the All Abilities RAMble gave her a sense of support. The space was experienced as safe to bring their children and safe for parents to share about their everyday struggles of parenting a child with disabilities. The parents’ experiences were not the focus of the present study and not included in this paper, but future research on PGP should explore and investigate the parents’ experiences of community.

Discussion

In this paper, we presented an exploration of 23 children with I/DD and their experiences with the All Abilities RAMble—a goat-assisted therapeutic activity offered by the PhillyGoat Project (PGP). To the authors’ knowledge, the present study was one of the first to explore a goat-assisted therapy experience for children with I/DD. Key themes in our study included the RAMble activating joy, RAMble as a place to practice skills, RAMble as a unique service providing transferable skills, RAMble as a personalized and child-directed program, and RAMble providing a sense of community. This research provides valuable insight into the child’s experience with goat-assisted therapy, which can inform future goat-assisted therapy interventions for children with I/DD.

Consistent with previous research (Harada et al., 2019; Nitta et al., 2020; Scholl et al.,
This study highlights the benefits of interacting with animals, more specifically goats, in gaining and maintaining skills in children living with disabilities. Key findings from the study focus on the skill development (communication and social skills), activation of emotions (specifically, positive emotions such as joy), and the transferability of the skills across different contexts such that it had a therapeutic impact but did not feel like traditional therapy—one parent referred to the RAMble as providing the children with access to “the secret benefits of therapy.” Guided by HAI and previous AAI literature, the current study findings support the impact of AAI, and specifically animal-assisted activities on children with disabilities and highlight the work of the PGP team in providing a safe and adaptable space during the RAMble for these children.

**PGP and Practicing Skills: Communication and Connection**

Our study found that the RAMble facilitated skill development in both communication and social skills. The interconnectedness of communication skill development and social skill(s) development was evident in our findings. The RAMble provided opportunities for the children to practice their communication skills in the session and supported communication skill development beyond the RAMble experience with friends, family, teachers, other service providers and community members. Previous research on AAI suggests that communication with animals may be less threatening for individuals with I/DD because verbal language is not required (Grandin, 2006). Our research is consistent with this finding and suggests that communication skills are practiced in the session with the goats.

Parents in the study highlighted the impact goats had on facilitating connection. Not only did the goats provide connection for the children during the RAMble but provided connection-building experiences for the children with other individuals outside of the RAMble session. This finding echoed previous research showing that animals can act as a social facilitator to connect individuals with I/DD to people around them, and prompt social interactions beyond other traditional objects of engagement such as toys (Fine, 2018; O’Haire, 2013; Sams et al., 2006).

This study contributes to the literature by exploring how goat-specific AAI can be used with children with I/DD. Moreover, the research examined the All Abilities RAMble from the perspective of parents, which is often missing from prior research on goat and animal-assisted interventions. The study confirms that the type of animal does matter when developing and implementing AAI programming that involves youth with I/DD. Practitioners interested in developing and implementing a similar program in their communities might consider trained animals with characteristics supporting the needs of children with I/DD, such as goats. The type of animal does matter and the role of the animal trainers and other program staff during the initial introduction to the goat is critical to the intervention. While goats have several unique characteristics that make them good candidates for AAI for children with I/DD, children may have initial apprehension about interacting with trained goats based on their experiences with untrained goats in other venues. Therefore, the role of the goat trainers and other program staff during the initial introduction to the goats and ongoing goat-child interactions is imperative. The goat trainers and program staff should go at the pace of the children with I/DD. Additionally, trainers and staff should provide multiple opportunities for the children to interact with the goats.
in ways that feel comfortable to them and are cognizant of the children’s and goat’s safety.

Another important aspect in the success of the All Abilities RAMble(s), and one that was noticed by the parents in the study, is preparation that the PGP team undertakes prior to each RAMble. The individual contact the Director has with each family prior to the RAMble, as well as pre-event staff meetings, prepare the staff (including the volunteers) for the unique needs and situations of each child participant and allows the staff to develop a therapeutic plan for each family. Post-event meetings afford staff time to debrief and take notes for modifications that might be necessary for future RAMbles. The authors recommend that practitioners interested in developing and implementing similar programming follow a model like this.

Additionally, programming such as the RAMble provides opportunities for multidisciplinary teams to collaborate, including those in fields such as disabilities, rehabilitation, environmental justice, sustainability, animal-assisted therapy, social work, and others. A small, non-profit such as PGP does not have the resources to hire many licensed staff; however, through partnerships with professionals in the community and university/college internship programs, they could expand the therapeutic components of their program. Therefore, the authors recommend creating these partnerships at the beginning of program development to enable collaborator buy-in from the start. Similarly, people with evaluation skills could be recruited early on to assist with the evaluation components of the program so that on-going evaluation efforts are initiated when the program first begins.

Finally, the authors recommend that practitioners interested in developing similar programming consider the unique aspects of the RAMble that the study participants truly appreciated; these aspects distinguish the RAMble from other community programs for children with I/DD. Creating a program that resembles the traditional services that children with I/DD often receive in communities would replicate the programming that the parents in our study did not find helpful for their children. For example, events with large numbers of people, lots of stimulation, generally no individualization, and lack of prior relationships with program staff, are ones that our study participants noted as unhelpful to their children. The All Abilities RAMble’s small size, consistency in staff involved with the families, individuation, and respect for children’s unique needs, provides an example of what the participants in our study are looking for in services for their children with I/DD.

Strengths and Limitations

Our findings yield important insights that researchers and health care professionals can use to explore future applications of goat-assisted therapeutic activities for children with I/DD. Each interview provided a unique perspective that helped the team construct a collective experience of the RAMble participants. However, this study has several limitations. First, the sample in the study was a subset of individuals that participated in the RAMble events. It is possible that qualitative findings from other All Abilities RAMble events (not just limited to April and May) would have resulted in more insights and experiences. Second, while the interview questions ask about other outdoor spaces and general service experiences, there is no specific
identification of other services or interventions that were being received when the children attended the RAMble events. While the interview questions prompt participants to answer specifically regarding the RAMble events, there could be overlap of impact from other programs and services that were being received when the children attended the RAMble events. It is possible parents incorrectly attributed the impact of other programs as the direct result from the RAMble events. Third, the study centered on the experiences of a smaller number of participants to understand their experiences of the program more in-depth. This study does not elicit generalizable findings to other populations but is an important reflection of the experiences of RAMble participants and families. Fourth, issues in phone quality caused breaks in the recordings and lack of clarity at times. Last, while it was an intentional decision to interview the parents about their child’s experience, future research should attempt to evaluate the program through different methods that can directly incorporate the children, such as a longitudinal study to provide insight about a child’s experiences over time or variation in methodology such as including a survey with a Likert scale, or using observational external data from other support services that work with a child.

**Conclusion**

The purpose of this study was to explore the experiences of children with I/DD who attended the PGP All Abilities RAMble. The results suggest there are several positive impacts from the All Abilities RAMble, further supported by the literature on AAI and I/DD. Additionally, the emergence of social skill(s) and communication skill development, transferability of acquired skills, and sense of community prompted provided strength in this exploratory inquiry of this specific form of AAI. Goat-assisted therapeutic activities, such as the PGP All Abilities RAMble, are an opportunity to practice skills and develop relationships that are often undernourished in this specific population. This study demonstrates the need for more empirical research on goat-specific AAI with children with I/DD, and their families. Future research recommendations include exploration of siblings and parents’ experience at the RAMble and further inquiry into what contributes to outdoor or nature-based programming beneficial to people with disabilities.

**References**


