

From a Parents' Perspective: Using Assistance Dogs for Children with ASD

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Abstract

A study was conducted to investigate how the lives of two parents were influenced by the services provided through a service dog to mitigate difficulties experienced by children with autism spectrum disorder (ASD). Children diagnosed with ASD experience cognitive, emotional, and social issues, which can create additional stressors for their families. To strengthen child and familial relationships, while addressing specific concerns related to ASD, service dogs hold great promise for supporting families of children with autism. A qualitative multiple case study design was used to explore the type of influence a service dog had on the parents of two young boys with autism. Data was gathered through interviews with parents and multiple observations of the family interactions. An open coding approach (Bloomberg & Volpe, 2012) was utilized to analyze interview and observational data. Service dogs benefit parents emotionally and physically. Service dogs develop a unique bond with parents in private settings and provide extra support in open environments. Findings in this study affirms current literature supporting the use of service dogs for children with ASD and contributes to the gap in literature highlighting the benefits for parents.

Keywords: autism, service dog, support animal, family, parents, disability

Introduction

In the United States, millions of individuals, including children, are identified with one or more disabilities. In children specifically, autism spectrum disorder (ASD) is becoming more prevalent. Autism spectrum disorder is a developmental disorder that children are born with (Hill, King, & Mrachko, 2014). The Center for Disease and Control (2014) estimates that 1 in 59 children born in the United States is diagnosed with ASD. The spectrum of autism disorder in which a child can be diagnosed is vast in unique symptoms; however, there are common characteristics a typical child with ASD exhibits. Children with ASD have social and emotional deficits, as well as repetitive tendencies in speaking and behavior (CDC, 2014). A child who is suspected to be on the spectrum can begin to portray symptoms such as no eye contact, little interaction with parents, or a lack of verbal language, among other developmental delays as early as six months to a year old (Rogers et al., 2014). As children age, social interactions are typically minimal because children with ASD are hypersensitive to environmental aspects like sound, lighting, and touch, as well as medical complications like seizures, irregular sleeping patterns, and gastrointestinal disorders (Water lander, 2012). More than half of children with ASD experience anxiety due to sensory issues and social deficits (Storch et al., 2013).

Supports for Children with ASD

Supports for children with ASD can begin as early as when the child is diagnosed as an infant and continue throughout the individual's life. The intensity of the support may vary depending on the age of the child, as well as the severity of autism. Supports can range from therapeutic or medical, to social and technological. When diagnosed early, a child with ASD may be able to receive supports known as early intervention. There are various forms of early interventions conducted in a medical, educational, or private setting. Typically, early interventions use a set structure with a peer, professional, and parental interaction as a support for the child. Multiple studies have found early interventions to be effective in reducing negative behavioral, emotional, and social interactions with others (Rogers et al., 2014; Wong, 2013; Xu et al., 2018; Yu & Zhu, 2018). As children age, interventions oftentimes consist of teaching a child to understand the cues of the body (McCurdy & Cole, 2014). Children who understand their body cues can learn to redirect their attention before they have a breakdown or other type of difficulty related to ASD. McCurdy and Cole found in their research children on the spectrum benefit socially, behaviorally, and academically when peers are used as a form of intervention (2014). While interventions that use others as supports for children with ASD are important, researchers are beginning to look for other methods of interventions.

Service Dogs as a Support for Children with ASD

Today, using an animal aid to support the wellbeing of an individual has become increasingly common. Many individuals are now using dogs as emotional support animals. However, there is a lack of common knowledge regarding the differences between a service dog and an emotional support animal. To provide federal protection to service dogs, as well as to clarify the difference from an emotional support animal, the Americans with Disabilities Act (ADA), originally enacted in 1990, now identifies the difference between therapy animals and service animals since amended in 2010. The Americans with Disabilities Act (Brennan & Nguyen, 2014) defines a service dog as:

Any dog that is individually trained to do work or perform tasks for the benefit of an individual with a disability, including a physical, sensory, psychiatric, intellectual, or other mental disability (p. 3).

The distinction between a service dog and a support animal is important because emotional support animals are not federally protected to enter public locations. In contrast, service dogs can only be asked to leave a public setting if the safety of another is affected or if the dog is unruly (U.S. Department of Justice Civil Rights Division, 2015).

Since ASD is considered a developmental disability, individuals with ASD are eligible to obtain a service dog. An autism service dog is trained to provide emotional support for children on the spectrum. The ADA acknowledges the act of an autism service dog assisting a child with ASD emotionally as an "invisible task" (Hill et al., 2014). This is different from a typical individual receiving support from an emotional support animal as service dogs are trained to provide tasks such as deep pressure or the use of their tongue to provide calming sensory stimulation for the child. Thus, the use of ASD service dogs benefits the child's emotional, cognitive, social, and physical wellbeing.

Benefits and Barriers of Service Dogs Supports

Research suggests that a service dog may contribute to skill development as well as other social benefits. Simple tasks completed by the child for both the individual and the service dog improve the child's fine and gross motor skills, benefitting the individual physically too. For example, these children may learn to perform simple self-care tasks such as brushing one's teeth and combing one's hair (Burrows et al., 2008). Improvement of social benefits is also demonstrated in the literature. Oftentimes, the service dog may serve as a conversation starter, resulting in increased social interaction between the child, parents, and other individuals (Carlisle, 2015; Crowe, Deitz, Winkle, Nelson, & Woolf, 2019; Hall, Wright, & Mills, 2016). Parents have reported experiencing less confrontation and social exclusion in public settings because people are aware that the child accompanied by a service dog has specific needs that require the support of the animal (Burrows et al., 2008). Studies from outside the United States have shown positive effects as children with ASD have demonstrated increased interactions with teachers, fewer behavioral issues, and greater social relationships with peers (e.g., Hill et al., 2014; Stevenson, Jarred, Hinchcliffe, & Roberts, 2015).

Benefits from service dogs as supports also positively influence parents of children with ASD. Studies show parents feel more secure and less concerned about their child's safety because they know the dog will alert them (Bibbo, Rodriguez, & O' Haire, 2019). Children's sleep with ASD has also been shown to improve with use of a service dog, consequently improving parents' sleep. Evidence also supports the notion that parent's stress levels decrease when service dogs are present within the family (Burrows et al., 2008). As parents begin to gain confidence in the service dog and their stress levels begin to decrease (Burrows et al., 2008). In addition to

seeing the child form a special bond with the service dog, parents have found there is a special bond between the dog and the family as a whole (Burgoyne et al., 2014). Forming a bond between the service dog, child, and the family provides more cohesion and consistency in the child's life without needing a consistent schedule.

While literature suggests autism service dogs are beneficial to both children with ASD and parents, there are a few limitations highlighted in the literature. Training a service dog is costly, which requires a substantial amount of money from a family who wishes to obtain an autism service dog. This can be a financial burden on some families (Hall et al., 2016). Additionally, while a service dog does provide stress relief and a less structured schedule, families have also noted the intense work it takes to care for the dog (Burgoyne et al., 2014). Taking care of a dog can become time consuming as a family needs to feed, bathe, and continuously practice service tasks to keep the dog disciplined.

There is little to no literature focusing directly on how parents who have a child with ASD are affected when implementing a service dog into the household as a support. To further investigate this topic, families that included autism service dogs were investigated in this research project. The overarching research questions for this study were, "What are parent's perspectives on service dogs as a support for children with ASD?" and "How do the interactions of an Autism SD and child with ASD affect the primary parent?"

Methodology

In this study, the researcher used a multiple case, qualitative design. Two families were selected to participate. Data was collected through interviews with the mothers of the families, and 1-hour observations in multiple private and public settings occurred.

Case Selection

Two families from one southern state were purposefully selected for the study. To find participants, the researcher sent a flyer to several online, social-media groups for parents with children who have special needs for over three weeks. Families were required to meet the following inclusion criteria to participate in the study, included: (a) at least one child that was diagnosed with Autism Spectrum Disorder between the ages of 8 and 16; (b) one guardian with one being a full-time caretaker for the child; (c) a certified service dog (SD) for at least one year. Two families responded to the recruitment flyer, who also met all of the inclusion criteria, and were subsequently selected for participation.

Description of Cases

Family 1.

Family one consisted of one full-time working father, one full-time working mother, one child with ASD, and one ASD SD. The eight-year-old child has severe autism, is nonverbal, and attends a public school to receive special education services. The mother, Sara, works full time, but considers herself to be his full-time caretaker. In addition to the services provided in a school setting, the child receives occupational therapy at home and is involved in extracurricular activities for children with special needs within the local community. Sara never considered getting a service dog until she heard about a small boy with severe ASD, like her son, who eloped at a park, and was found deceased a few days later. Sara, who disclosed she has carpal tunnel from her son tugging on her wrist, feared for the safety of her son.

Sara spent weeks researching SDs because taking on a SD is like adding another child into the family dynamics. The SD is there to assist the family, but the SD "is not a babysitter." Nonetheless, Sara is a strong supporter and advocate for SD's and SD rights under the federal protection of the ADA and believes SDs can be very beneficial to a family, like hers, when trained and handled correctly. The family chose to get a SD through a SD training organization outside of the state. The family spent two weeks with the organization to learn how to handle and utilize the SD for the benefit of the child. While the SD does not assist the child at school, the SD assists the family in public outings so the child can explore his surroundings more easily. The most critical factor Sara considers is her child's safety, so when the SD is present, Sara has more "peace of mind." Sara experiences more social inclusion too, claiming the SD prompts other children to talk to her child. In private settings, the SD serves as an emotional support. Sara explained the relationship between her son and the SD is unique. She gains emotional satisfaction knowing her son has a friend without conditions. She laughed and explained how her son would "pet [the SD] with his feet or walk by and tap him." She has benefited from having a SD as a support for her child but also understands having a SD is not for everybody.

Family 2.

Family two consisted of one fulltime working father, one stay at home mother, three children, one ASD SD, two pet dogs, and one pet cat. The 12-year-old child, who is high functioning on the autism spectrum, attends public school to receive special education services from the school. In addition to the services received through school, the child goes to occupational therapy and participates in extracurricular activities in the local community with other children. The mother, Dedra, was formerly a social worker but gave up her job when her son began experiencing multiple crises', needing her assistance. Dedra had knowledge of SDs but never thought her son had symptoms severe enough to require support such as a SD but considered a SD as the severity of the situation increased.

Dedra's son battled anxiety and depression for a few years, and regardless of the supports, ended up in a hospital for suicidal ideations and an action plan. When Dedra decided to look for a SD training agency she experienced difficulty finding an organization that would train a SD for a home with other pets but found one out of state. The family spent a week and a half learning how to properly handle and utilize the SD for the child's benefit. Both Dedra and her son were trained to handle the SD, who stays with the child at school, at home, and during extracurricular activities. The SD serves as a therapeutic focus for the child, giving him more independence with the support of his SD. Dedra does not have to watch her son as closely at home because his SD is always with him. His anxiety and escalations have decreased, and his bond with the SD has strengthened even though the SD has only been in the home for two months. The SD has positively impacted Dedra's life, but she still feels anxious about going into public setting. Dedra supports SDs and educating the public about federal laws that protect SDs and their handlers; however, Dedra claims obtaining a SD for a child with ASD may not be for everyone as it adds more responsibility for the parent. Nonetheless, Dedra believes SDs are beneficial to families who have done their research, utilize the SD properly and are educated about the ADA regulations.

Data Collection

Data were concurrently collected over a five-month period. The same process for data collection was conducted with each family. First, the primary caregiver was interviewed. Next, each family was observed ten different times throughout the five months in both a public and a private setting. The families did not receive any monetary compensation as the study was conducted for an undergraduate thesis.

Interviews.

Interviews occurred with the mother caregiver of both children with ASD. The interviews occurred before observations with the families took place. In each interview, the researcher used an intrinsic approach, asking nine multi-component questions to gain insight into the family's lives, as well as the parent's perceptions and experiences in implementing the SD into the home of the family (Stake, 2006). At moments where the researcher felt it was necessary to clarify or gain more insight about Sara or Dedra's responses, the researcher asked follow-up questions. After the interviews were conducted, the researcher transcribed the audio recordings into a word document to ensure the accuracy and validity of the study. Once the interviews were transcribed, the researcher sent the transcribed interviews to each mother for feedback.

Observations.

In total, ten observations were conducted with each family over a period of six months to increase the depth and comprehensive knowledge gained in the study (Bloomberg & Volpe, 2012). Each observation conducted was approximately one hour in length, with the researcher observing the family in their typical day to day life. To reach saturation for data analysis, the researcher conducted five in-home observations and five recreational observations. During the in-home observations, the researcher stayed in one central location to observe the family without interactions. The recreational observations were conducted in locations such as baseball games, boy scouts, doctors' offices, occupational therapy, a phone store, fast food restaurants, and a few other locations. The purpose of the observations was to observe the interactions, nonverbal cues, and reactions between the parent, SD, child, and other individuals, focusing specifically on Sara and Dedra. During the observations, notes were kept in a running field log on the researcher's computer (Bloomberg & Volpe, 2012). After each observation, the researcher would speak with the parent to clarify any questions from the observation or to gain more background information to help with data analysis. Additionally, the researcher reviewed the running field notes and wrote a personal journal to increase personal awareness when reflecting on the data.

Data Analysis

The data collected for each family was analyzed first as a single case study using an intrinsic case study approach (Stake, 2006). To begin the analysis process, the researcher began reviewing both the interview and observations to identify patterns within the study. As patterns were found, categories were created, and a working master

codebook was utilized. The lead researcher and second researcher met face-to-face, on multiple occasions, to discuss emerging codes and develop mutual agreeance. Subsequently, a final cross-case thematic analysis was conducted across both cases, to capture a qualitative essence of salient findings. The researchers looked comparatively at the similarities and differences between the two case studies using the analyzed data from each case study. The categories were then clustered together into themes that cross applied to both cases.

Trustworthiness and Credibility.

Several steps were taken by the researchers to ensure trustworthiness and credibility. Participant input through member checking was instituted throughout the study, from requesting feedback from the transcribed interviews to gaining insight and input from the mothers after each observation. In addition, a personal journal was kept throughout the observations for the researcher to reflect on the process, data collection, and potential biases the researcher might have (Bloomberg & Volpe, 2012). Lastly, the researcher continually utilized triangulation methods when reviewing the current research and data collected to find commonalities, differences, and inconsistencies.

Findings

In the cross-case thematic analysis completed to analyze the data, overarching themes were developed in both the interviews and the observations. Both mothers were interviewed regarding their perceptions of service dogs, and three themes emerged: (a) multifaceted safety, (b) timely responsibilities, and (c) benefits and barriers.

Interview Findings

Multifaceted Safety.

Both families valued the safety provided by an ASD service dog. In her interview, Sara disclosed her physical drawbacks as a result of keeping her child safe: "I have carpal tunnel in my right wrist, and I'm pretty sure it's from just that constant pull on him." Before getting their service dog, Sara expressed difficulty in going on family outings, but the safety provided by the service dog alleviates the challenge: "We go hiking, and we would have never done that before because we wouldn't be able to keep [my child] safe because he would [have eloped]." Observation data affirmed Sara's perceptions. Sara used the service dog as a grounding method to provide safety and comfort for her son in other public outings. For example, Sara liked to hold her son's hand in addition to walking with the service dog on the leash. At times Sara's son became restless and did not want to hold his mother's hand. Sara was not alarmed if her son dropped her hand and wanted to walk on his own because he was tethered to the dog. While the child and service dog did not directly interact, the working relationship provided Sara with confidence and reassurance in giving her son some independence. The SD provided Sara emotional respite too. Inside of Sara's home, her son often played by himself. Thus, Sara and the SD have created a special bond with one another. The relationship between Sara and the SD provided Sara with laughs and smiles, but when Sara was busy with work at home, the dog's need for attention from Sara could prove to be an obstacle in her work. Nonetheless, Sara displayed enjoyment from the presence of the SD.

Like Sara, Dedra expressed struggled with her son's safety before the SD: "He's ran on my mom in the grocery store and my mother in law has taken the kids to the park for a park day program during the summer." Since getting the SD, Dedra has experienced less emotional stress, and allows her son to serve as the main handler for the SD. During an observation, Dedra's son was beginning to escalate, but was able to recognize his bodily cues and work through his feelings without having a meltdown. Dedra only observed and marveled at the progress her son has made with the SD, stating he would not have finished that session in the past. Acknowledging the safety provided by the SD, Dedra was typically quiet, focused, and relaxed on outings, giving her son the independence, a typical child would receive at his age. Like Sara, Dedra developed a special bond with the SD at home too. When the child and SD were not interacting, the SD played with the other dogs in the household or sought attention from Dedra. Dedra typically acknowledged the dog in a high-pitched voice and petted him. This relationship provided Dedra solace.

Interviews and observations demonstrated physical safety and emotional respite for the mothers. The interactions between the family members and SD provided stress relief to both families in various settings. It was evident the presence of the SD gave both mothers extra assistance and the ability to observe their children more passively.

Timely Responsibilities.

Both mothers knew adding a SD into the family dynamic would increase their responsibilities. Although service dogs are trained to complete tasks and have many benefits, adding a trained service dog into the family created

another added responsibility for the mothers in many ways. The responsibilities required of the families began during the week long training periods with the SDs. The increase in these aspects did not significantly impact Sara positively nor negatively. Sara stated “If people [think] that this dog is a robot that’s going to do everything for you, [it won’t]. The dog is not a babysitter. You still have to be a good handler and be disciplined with it. It’s a commitment to maintain all of those skills and continue to train.” Sara also added new obligations such as letting the dog in and out of the house, feeding him, brushing his fur coat, and preparing the dog to work if she was going out of the house with her son in public. In public environments, Sara was responsible for both her son and the service dog. For example, after putting the service dog harness onto the dog, Sara needed to find the leash, a lint roller, a portable water carrier, and doggy bags in case the dog used the restroom. Sara held the service dog’s leash close to her when she walked with the service dog in public settings, but rarely had any issues with the service dog. There were a few instances when the service dog tried to jump into the vehicle before Sara gave the command to jump. In those few instances, Sara became stern and corrected the service dog.

Like Sara, Dedra did not appear to have a significant impact from the increase in responsibilities either. Dedra attested to the challenges faced by the family in the first days of learning how to handle the dog:

“[In] the beginning, I was terrified that this wasn’t going to work. [The dog] was wild and crazy, and I couldn’t even control him. He was so strong. He wanted his furlough volunteer who would take care of him on the weekends ... by the end of the week, it was completely different. You could already tell that they were bonding. [The dog] was learning on his own to distinguish [my child’s] scent for anxiety.”

Dedra’s son only had the service dog for two months, so the acclimation process required a lot of effort and patience. Dedra stated in her interview, “For the most part, when [the service dog] is home, he is just a dog. He’s still figuring out, “when am I on, and when am I allowed to be a dog?” Dedra’s typical household responsibilities were keeping her children on schedule, feeding the dogs, cleaning the house, and making dinner. Occasionally, Dedra let all three dogs outside to use the bathroom, but other times her son would take the dogs out instead. Like Sara, Dedra also completed the tasks as if they were part of a daily routine in her household. Dedra completed most parental responsibilities in a relaxed manner without any expression. At times her extra duties provided her joy. For example, when Dedra would go to feed all three dogs their daily vitamins, she would gain a smile on her face and laugh at the dog’s reactions. She would also use this time with the service dog to continue training on his commands before giving him his vitamins. Finding amusement in the service dog appeared to have minimal impact on Dedra’s daily life. Dedra’s responsibilities varied in public environments too. When Dedra’s son participated in boy scouts, she was able to relax unless he came to get her to let her know he was having issues. In other public environments, Dedra observed, corrected, and reminded her son to handle the service dog correctly and ensured the service dog was behaving correctly. Most of the time Dedra did not need to correct her son, but occasionally prompted him to use his words to command his service dog.

Adding service dogs into the household did increase the parental responsibilities for both Sara and Dedra. Sara and Dedra put forth more time to care for the dogs in their homes but were not negatively affected by the extra responsibilities. Interactions between the service dogs and children were not significant to the parent’s responsibilities. Neither mother was significantly affected by the increase in duties.

Benefits and Barriers.

The idea of using service dogs as a support method is becoming more popular, but there is still a significant gap in knowledge about service dogs within the general public. Both families found support from the service dog helpful in many ways. The relationship between the service dogs and family members provided emotional and physical benefits in various ways. At home, Sara attested to the unique bond built between the service dog and her child:

“I love to see my son bonding with any other living thing... it is cool that [my son] always has this non-judgmental friend around that gets his weirdness. [The dog] just lets him put his feet all over him, and [my son] does like to give him treats.”

The relationship between service dogs and the person they have bonded with proved to be reliable and unique.

In social settings, using the service dog as a safety method through a tethering system has been helpful to both Sara’s physical wellbeing and stress levels. Sara stated:

“It makes it so much less stressful going out ... It’s a huge peace of mind thing, but also physically because I’m not having to wrangle this 8-year-old kid as much ... [If my son] has a little bit more freedom, that means I might actually enjoy the outing as well because I am not constantly either pulling him, telling him what to do or just worried that he is going to get so annoyed that I won’t let go of his hand.”

Sara experienced positive interactions with others who understood the characteristics of ASD and guidelines around service dog rights. For example, Sara did not experience any negative attention at the doctor’s office when going to get the flu shot for her son. During the visit, the receptionist, the nurse, and doctors knew how to interact with Sara’s son. Sara’s concerns eliminated as a result of positive social interactions with individuals who understood how to engage with her child. In other public settings, Sara experienced both positive and negative interactions. During a trip to the grocery store to pick up dinner, Sara experienced judgment and selective isolation from the greeter at the door. The greeter let other families into the store without checking their membership cards; however, she stopped Sara, requiring her to show her membership card at the front door. While Sara was doing so, two small children approached her and asked if they could pet the dog and the greeter quickly told the girls “no.” Sara looked at the greeter, the children and said, “yes you can, thank you for asking.” Sara walked swiftly to the back to get dinner, avoiding eye contact with the other individuals staring at her son and service dog with judgment. The store was busy, so Sara paid for her items on the app and made her way to the store’s exit to avoid waiting in line. On the way out of the store, Sara commented, “you learn to ignore the looks of others” and continued to walk through the checkout lines to the door. Sara did not show any negative emotions, but it was evident that Sara felt uncomfortable and avoided interactions with others, walking quickly through the store. Sara was still aware of her surroundings though she did not make any eye contact with others as she shopped for her dinner.

Dedra’s experiences at home were similar to Sara’s. Since getting the SD, she has been able to de-escalate a potentially stressful situation by a simple command directed towards the service dog: “I no longer focus on getting [my son] to focus on using his coping skills. Instead, I command [the service dog, and he] takes control over it.” Meltdowns now last significantly shorter and occur less often as a result of the emotional stability provided by the service dog; furthermore, in every minute spent between the service dog and child, a special bond is created. In public outings, Dedra experienced social pressure in situations with strangers. Dedra had a few positive interactions, seeming relaxed with a neutral expression and was very aware of her surroundings while she watched her son and the service dog. For example, at the grocery store, Dedra immediately stopped looking at the items on the shelf to observe her child when an employee asked if she could pet his dog, and he politely said “No, sorry. The dog is working right now.” Dedra reaffirmed the child in his answer. Dedra experienced negative interactions too. Dedra’s son and his service dog stood next to her while she shopped when an older man with a dog in his shopping cart passed by. The small dog started barking at the service dog. Shortly after the man passed by, he came back to Dedra. Dedra was caught off guard by the approach of the man and appeared defensive and uncomfortable. The man claimed his dog was a service dog. Dedra took the time to educate the man on service dogs and emotional support animals, explaining his dog was not a service dog

Neither family worried about the stigma or perception of others because they were in the comfort of their own home. The security both parents felt at home was not perceived in public environments. Negative experiences in public settings were a common occurrence for both families. From judgmental looks to social confrontation, Sara and Dedra encountered positive and negative experiences due to social stigmas. While social pressures were a common occurrence for both families, the benefits provided by the service dogs proved to be more impactful.

Discussion

The study’s purpose was to observe how parents were impacted by the interactions between their child with ASD and a service dog. Overall, the use of service dogs as a method of support positively benefited parents. Parents’ main priority in obtaining a service dog was due to safety concerns for their child. Service dogs provided the children with safety and emotional support. Parent’s experienced less stress and worry as a result of the extra support. Interactions between the parent’s and service dogs impacted parent’s as well. Parent’s responsibilities increased around the household, and the family dynamics shifted with the service dog in the house. Parent’s felt comfortable within their households, and the service dogs alleviated the stressors of leaving the house, but the families were still subjected to stigmatization and social isolation in typical outings.

Safety Considerations

Safety considerations is common occurrence in the current literature related to service animals as supports for children with ASD. Findings in this study demonstrated the importance of safety provided to the child when supported by a service dog. Across both cases, the service dog was tethered to the child in open environments, preventing the child from eloping. The parents in both families experienced a decrease in stress and an increase in the enjoyment of social outings. These findings corroborate the conclusions made in a study conducted by Burgoyne et al. (2014). Burgoyne et al. created a survey to gain insight into the parental perceptions of those who have an ASD service dog for their child. The study found the most common and prevalent perception among parents was the drastic increase in safety the service dog provided their children and the security the parents felt as a result (Burgoyne et al., 2014).

Sustainment of Relationships

Current literature suggests positive emotional and physical effects from the child and service dog relationship. In a study conducted by Bibbo, Rodriguez, & O' Haire (2019), parents were surveyed to gain insight into the psychosocial effects the service dog has on the family. The study found the parents built their relationship with the dogs, developing a trusting relationship with the service animal (Bibbo, Rodriguez, & O' Haire, 2019). This study complements the limited literature highlighting the service dog and parental relationship within the family. The findings of this study provide a more in-depth perspective of personal and working relationship developed between the service dog and parents. Across cases, relationships between the service dog and parents were stalwart and parental interactions played a key role in how the family was impacted. At home, parents and service dogs exhibited a typical relationship between a pet and owner and caring for the service dog also helped to cultivate a unique bond. In public environments, the parents and service dogs demonstrated a productive connection that benefited the family. Ultimately, the personal bond between the parent and service dog positively influenced the working relationship between the service dog, child, and parent.

Social Pressures

Social isolation was a common occurrence for families in public outings. Due to the lack of common knowledge and understanding of service dogs, strangers subjected the families to undue judgment. Across both cases, general outings to restaurants and grocery settings still appeared to increase parent's stress levels due to the unpredictability of others. Both mothers exhibited an increase in social awareness but a decrease in social engagement. On some occasions, the parents still dealt with confrontation and the burden of educating individuals on service dogs. Current studies suggest less social stigmatization due to the presence of service dogs, but still acknowledge the issue of stigmatization due to a lack of knowledge in the general public (Burgoyne et al., 2014; Burrows et al., 2008). Additional research suggests that service dogs can help to stimulate social conversations (Carlisle, 2015; Crowe, Deitz, Winkle, Nelson, & Woolf, 2019; Hall, Wright, & Mills, 2016), and findings in this study are compatible with this literature. For instance, while some social interactions were positive and without social constructs, other interactions occurring in public/open environments were uncomfortable and reproaching. The presence of the service dog did start educational conversations about service dogs and the rights under the ADA; however, they also proved to be a deterrent of social interaction and a spectacle for isolation.

Limitations

Limitations of this study are crucial to consider in the interpretation of the data. Foremost, the perceptions of the individuals with disabilities were not sought in this study, although these perceptions might have yielded important insights about the studied phenomenon. Second, only the mothers of the two children with autism were interviewed; however, further insights could have been gained from the father or other pertinent caregivers in the home. Lastly, the study was limited to two exploratory case studies. While there were some differences in characteristics and experiences across both cases, the insight gained from this study is limited to the scope of two family's experiences. The participation of additional families could have strengthened the transferability of findings in this study.

Implications for Research and Practice

Future research is needed to strengthen the literature and provide affirmation or refutation to this study's findings. Lengthening the timeline and increasing the observations will allow researchers to conduct a more in-depth study, exploring environmental factors more intensely than the scope of this study. Researchers should also consider increasing the number of family participants in the family as well as locations of observations (e.g., extracurricular environments, school location). Considering various perceptions from a mixture of participants may also lead to improved consistency in findings. Finally, future studies should seek to understand

the affordability and usability of service dogs in comparison to other less costly supports (e.g., family dog, support animal). While there were multiple benefits found in this study for using a service animal as a support for children with ASD, there may in fact be similar benefits from other types of similar supports.

In light of the findings from this study, several implications should be considered to increase the quality of life for families of children with ASD. In particular, findings highlight persistent societal issues of social constructs and barriers sometimes created within the general public. An increase in social awareness of the usability of service dogs as supports for children with ASD is a necessary step in increasing the comfortability of using this type of support in community settings. Children, of all ages, should also be educated on different abilities of individuals with disabilities through demonstrations and role-play activities within public and private contexts. Additionally, social media platforms should be used to increase social awareness of service dog rights, highlighting the significance of service dogs on the lives and families of children with ASD. To further increase social awareness, work-place trainings for new hire employees working in public stores, should highlight the use of these types of specific supports and appropriate interactions with families, which in turn, will help to alleviate negative stigmas that cause social isolation of families with service dogs. As a result, the quality of life for the parents, child, and family unit will increase. Until the necessary steps are taken to reduce social stigmatization and increase the universal awareness to the public, parents cannot fully reap the benefits that service dogs can provide to their families.

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