A DELPHI STUDY EXPLORING ASSESSMENT, TREATMENT PLANNING, AND CARE COORDINATION CONSIDERATIONS TO INFORM STANDARDS OF CARE FOR SERVICE DOG HANDLERS

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by
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Currently, there is an increase in the use of service dogs for a wide range of disability related needs. However, research is lacking on the resources and supports service dog handlers require, assessments, outcome measures, and competencies and continuing education for medical and mental health providers working with handlers in an assessment or ongoing service role. The purpose of this qualitative Delphi study was to determine the recommendations experts have for consideration in the development of standards of care for service dog handlers. The conceptual framework was based on a biopsychosocial model of the service dog intervention and on the framework of phases of treatment a service dog handler is likely to experience. Fourteen handlers and service dog industry professionals served as participants. The iterative process undertaken with the panel resulted in 140 statements across eight categories. These statements were endorsed by panelists based on their level of agreement and statements meeting specific thresholds of agreement were compiled. The panel also generated information about definitions used by panel members, handler experiences, and rank-ordered lists of facilitators and barriers to positive service dog outcomes. The research from this study contributes to positive professional change by identifying preliminary areas of education required for counselors-in-training. The results also provide insight into current industry practices and the needs and priorities of service dog handlers.

Keywords: assistance animal, assistance dog, counseling, Delphi, disability, guide dog, rehabilitation counseling, service animal, service dog
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CHAPTER 1: INTRODUCTION

The Centers for Disease Control and Prevention (CDC) estimates that 26% of adults in the United States have some form of disability (CDC, 2017). A disability is generally defined as a mental or physical condition that restricts an individual from engaging with the world around them or performing major life activities, such as caring for oneself, communicating, walking, hearing, or seeing (Americans with Disabilities Act, 2008). In order to mitigate these restrictions, people with disabilities have used a variety of assistive devices and technology such as mobility aids, prosthetics, hearing aids, and varied adaptive devices designed specifically for tasks that would otherwise be difficult or impossible to do independently.

Service animals are a less frequently discussed type of assistive technology, and one that can come with considerable stigma and misunderstanding (Mills, 2017). Service animals have been used to assist individuals with disabilities, particularly those with visual and mobility impairments, with The Seeing Eye, the first U.S. school for guide dogs founded in 1929 (Blattner, 2015). Since then, the work of service dogs (SDs) has expanded and the demand for SDs has increased. The International Association of Assistance Dog Partners (2017) estimates there are 150,000-200,000 active SD teams worldwide, but that as many as 10 million individuals with disabilities could benefit from being placed with a SD. In addition, SDs for mental health concerns or individuals with comorbid mental and physical diagnosis have become more common, with many organizations specializing in training SDs for PTSD and other mental health conditions (Psychiatric Service Dog Partners, 2019). Programs and trainers looking to place SDs routinely require clinical impressions and letters of medical necessity to determine
which applications to accept with demand outstripping supply. As the size and service needs of this demographic increase, counselors are likely to play a role in either the treatment of existing SD teams or to be pivotal in the decision-making processes involved with the formation of new SD teams.

Statement of the Problem

While high demand and limited supply for SDs exists, it is vitally important for organizations providing SDs to be able to make decisions about client applications that support the most impactful SD placements. Programs often will ask for the recommendation of a medical or mental health provider, depending upon the disability the SD would assist. However, there is no standard assessment to determine whether an individual is likely to benefit from a SD. Due to the lack of training or resources for these service providers, most clinicians put in the position of recommending a SD for a client lack understanding of the many complex elements of SD teams and the challenges of public interaction as a SD handler. This may lead to poor recommendations or lack of consistency in recommendations between providers. SD handlers run the risk that when they change providers or are referred for other services, they will encounter clinicians with different levels of knowledge about SDs, resulting in lack of needed support or poor treatment outcomes. Additionally, with no uniform care guidelines or educational resources about SDs, clinicians risk operating outside their scope of practice if they provide support for a client. However, not supporting SD recommendation requests could represent a form of discrimination, with no identified place to send clients to seek this service.

This gap in services and lack of education both for healthcare providers and potential SD handlers has likely contributed to numerous scams that clients seeking SDs may be vulnerable to.
These range from organizations charging large fees to place untrained or medically unsound dogs to online evaluations where clients can pay to get a letter recommending a SD to fake SD registries providing misleading and false information about SD laws. The standardization of knowledge and assessment protocols within mental health and medical care would not eliminate these scams but would increase trust within the disability community that requests for SD placements will be fairly and uniformly evaluated. More knowledgeable providers would also be able to educate their clients about these risks and provide better recommendations to clients who do not wish to pursue a SD through a program, or who are exploring the possibility of a SD and may be less likely to be a successful handler.

There is a lack of understanding of what makes good SD teams function, as well as what supports and resources handlers are likely to need over the developmental life of a team. Very little research has looked into the needs of handlers as partnerships come to an end, or in the event of the team experiencing a trauma such as an attack on the SD. If the handler’s disability related needs shift, no research indicates how an already established team might navigate the retraining that may be necessary.

Little is known about how much and how programs and trainers support developing handlers as part of a beginning team or over the lifespan of a SD. There are no researched interventions that clinicians could recommend or that programs could adopt to facilitate teams reaching a better working dynamic. This leaves programs and trainers to navigate their transfer training protocols without empirically supported approaches, and does not encourage collaboration between the SD industry and clinicians. While it is reasonable that counselors, rehabilitation professionals, and medical providers should be involved in these processes, the
lack of research and education about SDs means that there is rarely an interdisciplinary treatment team approach that would best support the SD handler.

**Research Questions**

What recommendations do experts on SDs have for consideration in the development of standards of care for SD handlers?

Areas of particular interest include needs during different team development stages, and overall resources and supports required by handlers. Likely development stages include initial handler screening and assessment for suitability, team formation needs, ongoing needs, and team dissolution needs.

**Significance of the Study**

The interdisciplinary nature of SD implementation presents a significant challenge. In the literature, there is currently no interdisciplinary research, and the research that exists is siloed in fields or focused on certain types of SDs. This situation further contributes to the barriers of lack of standardization of language, approach, and overall conceptualization of SD dynamics. By bringing together SD professionals, SD handlers, and mental health practitioners to share knowledge, this study represents a unique attempt to bridge many gaps between stakeholders in SD handler care coordination and SD team outcomes.

This study has generated preliminary content for inclusion in the training of service providers working with SD handlers and considerations for policy recommendations related to the service dog industry. The inclusion of a panel with diverse perspectives led to the exploration of language and definitions, handler experiences of stigma, and facilitators and barriers to team
outcomes. Resources and supports currently lacking for handlers were addressed by the panel, along with insight into elements of the screening, placement, and team formation processes.

**Limitations of Delphi Studies**

The Delphi method employed in this research presents certain threats to validity. Most important is the potential pressure for convergence (Hasson et al., 2000) which may be mitigated through participant selection (Goodman, 1987). Due to the time and effort required of participants in a Delphi study, response rate and potential for dropout must also be considered, and clear communication with participants in the selection phase is essential to minimize this, though it cannot be eliminated as a risk (Hasson et al., 2000). While Delphi studies are established as an effective method of generating expert opinions, reliability is questionable and results may not be reproducible.

The role of the researcher must be maintained as that of facilitator rather than contributor to avoid the introduction of researcher bias. In coding and summarizing the data from participants, it is important that the researcher accurately summarize, avoid omission, and maintain a focus on the essence of the group narrative to ensure accurate representation of the panel’s opinions (Avella, 2016).

The Delphi method is flexible and has been adapted to a wide range of topics with various research goals. This has resulted in a lack of clear parameters regarding choices such as participant sample size or participant selection approaches. This represents a risk of poor application of the methodology and necessitates that the researcher be intentional in choices made where a universal guideline is not available.
Definition of Terms

The following terms have been operationally defined for this study to improve clarity and minimize misunderstanding.

Service Dog (SD) Terminology

The terms *service dog*, *service animal*, *assistance dog*, and *assistance animal* are all used in various laws and policies (Parenti et al., 2013). These terms are seen as interchangeable and the author will use the term *service dog* (SD) for the purposes of uniformity outside of quotes or citations that may include other terms. According to the Americans with Disabilities Act (ADA), “A service animal is a dog that has been individually trained to do work or perform tasks for an individual with a disability” (U.S. Department of Justice, 2011). Therapy dogs and emotional support animals (ESAs) are not the same as a SD (See page 8, Disambiguation of Types of Working Dogs Section).

*Service Dog (SD)*

A fully trained working service dog meeting the ADA definition above, typically post placement or having met some other notable developmental marker.

*SD in Training (SDiT)*

A dog-in-training or the dog partner in a team still in formation.

*SD Handler*

The human partner the dog is placed with.

*SD Team*

The SD and the handler as a unit.
Trained Task Work

The ADA clearly states that comfort does not constitute a trained task (U.S. Department of Justice, 2011). Examples of common trained tasks are medical alert or response, mobility support such as guide work or item retrieval, opening and closing doors, turning lights off and on, behavior interrupts, and alerting to various changes in the team’s environment (Psychiatric Service Dog Partners, 2019). Tasks are highly individualized and must be designed to mitigate the specific symptoms of the handler’s disability.

Public Access

Public access work, or simply public access, is a term used by handlers and by trainers to denote times the team is accessing the environment together, particularly in non-pet friendly spaces. It is so called due to the public access protections outlined by Title III of the ADA that allow for the protection of the handler’s rights to access spaces where the public is generally permitted and to be accompanied with their medical equipment, in this case, their SD (U.S. Department of Justice, 2011). Public access work may be done specifically for training purposes or may be done in the day-to-day activities of a working team not actively training.

Transfer Training

Transfer training is a term sometimes used in SD programs to describe the period of time a handler trains with their SDiT between being paired and being fully placed with the handler. In programs, this experience frames the placement process.

Post Placement

This concept pertains primarily to SDs from programs, as the processes and resources for owner trainers or privately trained SDs are different. For program trained SDs, the team likely
experiences some form of transfer training where the team is not living together or working together. Once the team is ready, the SD is fully placed and sent home. The degree of support post placement may vary and challenges are likely as this can be a jarring change for the handler and for those around them.

**Assistance Dogs International (ADI)**

ADI is an accreditation body for SD training programs. This is the most common accreditation for programs in the United States (Assistance Dogs International, 2019).

**Disambiguation of Types of Working Dogs**

Two kinds of working dogs commonly confused with SDs are Therapy Dogs or Facility Dogs (TDs or FDs) and Emotional Support Animals (ESAs). TDs are dogs who are owned by an individual who uses the dog to provide comfort and interaction for other people (Psychiatric Service Dog Partners, 2019). TDs have commonly been used in settings like hospitals and nursing homes to visit patients. More recently, animal assisted therapy (AAT) has increased in prevalence, with mental health professionals using TDs and other animals in treatment plans with their clients. As a result of the growth in this area, the American Counseling Association set best practice guidelines for professionals using AAT. Other settings TDs may work in include courtrooms or crisis response dogs attached to paramedic or other first response units. TD owners do not have public access rights with their animals. Instead, they negotiate with the facility personnel where they would like to have the dog working, and they impose their own requirements of training or certification through their policies regarding TDs (Psychiatric Service Dog Partners, 2019). This process is an ongoing agreement of conditional access to a specific facility between the facility personnel and the TD owner.
ESAs are pets that provide important symptom mitigation to an owner with a disability by living with them and providing passive assistance through comfort. ESAs do not necessarily have any training and may be any type of animal that can be owned under applicable laws. A treating provider must assess the owner of the ESA and write a letter of medical necessity addressing why the animal is necessary for symptom mitigation. This letter and other documentation may be requested when the owner is seeking disability-related accommodations. ESA owners have protections under law to have their pet live with them to provide equal access to housing that may not be pet friendly (US Department of Housing and Urban Development, 2013). ESA handlers do not have public access rights like SD handlers do, and are therefore not permitted to be accompanied by their animals in non-pet friendly environments (ADA National Network, 2014).
CHAPTER 2: REVIEW OF THE LITERATURE

Despite SD use as a systematic intervention as early as the late 18th century, and the expansion of the work of SDs to assist with a variety of disabilities in recent years (Blattner, 2015), there remains a lack of empirical knowledge and professional guidance regarding the implementation of SDs into treatment plans for individuals with disabilities.

According to the definition in the Americans with Disabilities Act’s (ADA) 2010 Standards, “Service animals are defined as dogs that are individually trained to do work or perform tasks for people with disabilities” (U.S. Department of Justice, 2011, para 4). The defining feature of a SD which sets it apart from a therapy or facility animal or from a pet is this ability to do work or perform tasks for a handler with a disability. This means that when considering a SD as a treatment intervention for a client, task work must be considered the primary intervention, and in order to ethically recommend a SD, there must be identified work or tasks the SD can do to mitigate disability symptoms.

Due to the siloing of SD research, challenges of terminology and lack of standardization, and the lack of research presenting a uniform approach to this topic the literature review does not follow a traditional format. First, a scoping review of the literature is documented. A flow chart of the search is presented in Figure 2-1 on page 13 and an overview of the search results is available in Figure 2-2 on page 22. The results are organized primarily by the number of articles focusing on the various types of SDs and their general interest area. Following the scoping review, a more traditional literature review focused on practice considerations begins on page 23. To provide information in a common clinical framework, a conceptualization of SD impacts within a biopsychosocial framework is presented along with an overview of treatment stages at the end of this chapter.
Literature Review Search Methodology and Limitations

Search Methodology

Identifying search terms was a particular challenge due to the lack of common
terminology as well as differing norms within different areas of research. A preliminary search
was undertaken in summer 2019 using the search terms ‘Service-dog* OR service-animal* OR
assistance-dog* OR assistance-animal*’ in order to identify possible limitations and evaluate the
most effective search approach. The databases used were PsychInfo, Pubmed/Medline, and
Science Direct with searches limited to peer review articles, but conducted on full text. This
search identified 1,342 articles using these search parameters. The Nursing & Allied Health
Database was also included for the original search but did not return any unique relevant articles.
The search term ‘companion-dog*’ was evaluated, but rejected due to returning approximately
triple the results and a high number of results that were not relevant. ‘Support-dog*’ was also
evaluated and did not drastically change results.

At this point, a bibliographic analysis (further described below) was conducted using
articles already identified by the researcher, as well as related articles featured through databases
and reference management software, reference lists of recent articles on SDs, and articles
included in systematic reviews. This bibliographic analysis led to the conclusion that there was a
risk for missing several categories of SDs based upon the language used by authors; even when
searching full text, several articles on hearing dogs and diabetic alert dogs were not coming up in
search results. These articles do not include any of the standardized terms for SDs and only
reference the specific type of SD being examined. It could be concluded that nomenclature
barriers may extend to other types of SDs, particularly seizure alert or response dogs, and to a
lesser extent some research related to guide dogs.
In response to the analysis of the preliminary search, second systematic search conducted in early 2020 consisted of querying PsychInfo, Science Direct, and Pubmed/Medline for peer-reviewed articles’ titles, abstracts, and keywords. Results were limited to articles published prior to December 31, 2019. The final search terms were ‘service-dog* OR service-animal* OR assistance-dog* OR assistance-animal* OR hearing-dog* OR guide-dog* OR alert-dog* OR response-dog*’. This resulted in a total of 636 unique articles after duplicates were removed. Bibliographic analysis showed all previously identified articles being returned, including some that had been challenging to get returned during the preliminary search term exploration. Initial exclusions resulted in 332 potentially relevant articles. This initial cut was made based on articles being obviously unrelated to the topic area, remaining non-peer-review articles, and a small number of non-English language articles. A second cut was then made, examining whether the articles were focused on SDs, as defined by the ADA or equivalent laws depending upon the country of origin. This cut eliminated remaining articles focused on military and police dogs, companion dogs, animal assisted therapy involving dogs, and facility or therapy dogs, as well as articles that more broadly focused on working dogs or a combination of these dogs with or without inclusion of SDs. After implementing these procedures, a total of 259 articles were then further reviewed and coded for this study.
Many articles on the topic of SDs are conceptually based and there are relatively few empirical studies.

Although every effort was made to identify effective search terms and to appropriately screen and categorize articles, the lack of standard terms for SDs presents a significant limitation. Barriers identified include differing labeling norms between disciplines, and a general lack of knowledge of SD terminology and other differences between types of working animals causing conflation on the part of researchers or of participants, which creates a threat to study validity.
Clear definitions, explanation of screening protocols, and intervention parameters are needed to ensure future research is valid and aligned with the rest of the field.

As SDs or their equivalent will be defined by the laws of the country they operate in, terminology can vary greatly between countries and even within a country between different types of laws. Societal norms, the history of and current acceptance of SDs, program development, and general perception all may vary greatly between countries or regions as well.

**Interdisciplinary Research**

The primary interest of the researcher conducting this review is upon available literature that relates to the SD team as a unit or the outcomes for handlers paired with various types of SDs. However, since much of the available literature at present relates to either legal and policy discussions or management of SDs, these areas are briefly explored below. The existence of so many legal, policy, and definition-focused articles in peer-reviewed journals suggests a gap in the research pertaining to SD issues, and that misconceptions and lack of information are being identified by authors. Articles about management are situated in the broader field of veterinary and animal science research. While they are included here due to a focus on SDs, they may not be the most applicable research available regarding topics such as temperament or training strategies.

**Knowledge and Context**

Thirty-four articles concerned knowledge and context-related topics, most notably those pertaining to laws, policies in line with applicable laws, and the definition of SDs. While some histories of working dogs were excluded based on a focus on non-SDs, a history of guide dog use by veterans was identified (Ostermeier, 2010) as well as a history of the Seeing Eye (Fishman, 2003). Two articles focused on placement and geographic availability of SDs with an effort
made to address historical trends (Walther et al., 2017, 2019). Three articles focused on defining SDs in the U.K. (Audrestch et al., 2015) and the U.S. (Krawczyk, 2017; Modlin, 2000) stress the role of healthcare providers and rehabilitation professionals, the need for further education for providers, and the importance of further research to inform placement decisions. Conceptual articles note the education gap in this area (Singleton et al., 2019) and need for different types of providers including nurses and pediatricians. Attitudes of the public are examined by three articles, with comparisons drawn geographically in one case (Miura et al., 2002) showing the potential for significantly different perceptions in different countries.

The remaining 21 articles with knowledge and context related content focus on explanations of the laws pertaining to SDs in the relevant country, typically with the recommendation of policies relevant to a specific setting. Healthcare settings were the most common among these articles (N= 10). Overall, articles focusing on policies relevant to a specific setting were inclusive of different types of SDs, with earlier such articles only mentioning guide dogs. It is important these articles be read critically to ensure they are still up to date with any legal changes. It is also important to recognize that some authors are advising substandard practices and demonstrating discriminatory bias in their guidance (Rothberg & Collins, 2015)

**Management of SDs**

Ninety articles fit into the broad category of SD management with 72 of these focusing specifically on guide dogs and the remaining 18 more broadly upon any type of SD. Selection and temperament was the largest of these categories, followed by more general training approaches and research. Articles purely veterinary in nature focused on either skeletal conformation for mobility work suitability and on genetic research for breeding programs.
Research Focused on Types of SDs

Guide Dogs

Of the 100 articles pertaining to guide dogs, four were historical or legal articles and 72 pertained to management topics outlined above. The remaining 24 articles centered on handlers or on elements of the team. A greater variety of research questions arose in this category than others. Four articles addressed visual and ophthalmic profiles of guide dog users in the UK and France. Three articles provided case studies or qualitative data relating to regions where there are indicators that guide dogs may not be as well accepted. Main themes related to team bond and attachment (Fallani et al., 2006; Valsecchi et al., 2010) as well as identity impact for the handler (Sanders, 2000) and social aspects of guide dog use compared to other aids (Deshen & Deshen, 1989). Co-operative interactions (Naderi et al., 2001), handler assessment of behaviors and their positive or negative contributions to outcomes (Craigon et al., 2017), and positive contributions to mobility of handlers (Yamamoto et al., 2015) were explored. Other articles that were particularly of note for their contribution to emerging areas of research included one article examining successful and unsuccessful guide dog matches (Lloyd et al., 2016), and an article proposing a model for adapting existing placement models to better serve adolescent handlers through use of support dogs for companionship and dog handling skill building until the individual is ready for the responsibility of handling a SD in public (Gravrok et al., 2018). Two articles explored the incidence and impact of attacks upon guide dog teams (Brooks et al., 2010; Marquès-Brocksopp, 2015), recommending better understanding that allows providers to facilitate team needs and support for recovery following an attack.
Hearing Dogs

Research on hearing dogs was often combined with research on other types of SDs, particularly those for mobility or other physical disabilities. Of five articles focused solely on hearing dogs, one literature review was identified (Martellucci et al., 2019) and another article was purely veterinary in focus. The remaining three articles all addressed the psychosocial effects of hearing dogs and the benefits and drawbacks reported by owners. One of the articles was a longitudinal study and themes included the positives of companionship and hearing alert representing safety to handlers (Guest et al., 2006). Potential drawbacks included changed relationships with family and community which appeared to be unforeseen by potential handlers (Hart et al., 1996) as well as behavior concerns or unrealistic expectations of the SD (Hart et al., 1995).

Autism SDs

The majority of research on Autism SDs is focused upon the effect on parents and the family unit, with research suggesting (Burrows, Adams, & Millman, 2008) these SDs form a primary relationship with the parents, and secondarily with the child. This research additionally identifies the specific challenges of dynamics present in families that include children with autism that may impact behavior and success of Autism SDs and should be considered. All current research in this area addresses pediatric clients and therefore the parents, who do not have a disability, are the primary handlers of the SD even though the SD is trained to perform tasks on behalf of the child.

There were nine articles identified as focusing upon Autism SDs. Four articles addressed family outcomes including parent stress levels and perspectives, one addressed child cortisol levels, and one examined general outcomes related to the child. One article was focused on laws
specific to schools and access, one article focused on dog welfare and behavior, and one examined a program’s use of outcome measures related to autism SD placement. Themes identified included reduction of morning cortisol in parents (Viau & Champagne, 2017) and children (Viau et al., 2010), child safety (Burrows, Adams, & Spiers, 2008; Smyth & Slevin, 2010; Viau & Champagne, 2017), public reception of the SD (Burrows, Adams, & Spiers, 2008; Viau & Champagne, 2017), and a general consensus of family cohesion improvement. Challenges presented by an autism SD included the time, finances, and effort involved in maintaining training (Burrows & Adams, 2008; Smyth & Slevin, 2010). Overall studies in this area report an increase in family quality of life.

**Diabetic Alert Dogs**

Fifteen articles focused on diabetic alert dogs. The majority of articles (N= 8) addressed the effectiveness and accuracy of diabetic alert dogs and their role in a potential treatment plan. Given that all articles on diabetic alert dogs were published after 2013, this is clearly an emerging area of focus for SD task work and resulting partnerships. One additional article addressed the use of diabetic alert dogs and their successes, with a goal of finding suitable alternatives to diabetic alert dogs. There was one critical narrative overview of diabetic alert dog use (Lippi & Plebani, 2019). The remaining five articles looked at handler perceptions of diabetic alert dogs’ work and quality of life improvements, as well as the value of diabetes alert dogs both generally and specifically as a preventative intervention that reduces treatment costs (Rooney et al., 2013).

**Seizure Alert and Response Dogs**

Eleven articles were included relating to seizure response dogs and seizure alert dogs. It is notable that in this category, due to the focus upon shaping the dog’s alerting behavior, some
articles were excluded based on search criteria but related to the alert behaviors of family pets who alert to their owner’s seizures. Two articles were included that address pets because of an equal focus on SDs, a broad definition of alerting dogs, or an additional component of interviewing SD program trainers. One article (Catala et al., 2018) was a scoping review on alerting and responding behaviors in dogs including SDs. One article (Kirton et al., 2008) was a program evaluation and also addressed the shaping of alerting behavior as well as quality of life improvements in handlers. The majority of articles in this category (N=6) focus on effectiveness of alerting behaviors through case studies (Martinez-Caja et al., 2019), trainer interviews (Dalziel et al., 2003), or handler self-reports (Martinez-Caja et al., 2019). Current research on effectiveness of dogs alerting to seizures is mixed, resulting in a recommendation to proceed with caution in this area (Brown & Goldstein, 2011); however, some preliminary research has suggested a reduction in the frequency of seizures and increase in handler quality of life (Brown & Strong, 2001; Strong et al., 1999, 2002).

Mobility SDs (“Physical Disabilities”)

Twenty-one articles focused on mobility SDs. Of these, five examined very specific functional outcomes of a “trained mobility dog” to determine probable effectiveness and impact of mobility SDs assisting with gait disturbance, walking speed, or wheelchair propulsion. The remaining 16 articles included one literature review (Winkle et al., 2012) and the development of an outcome measure for mobility SDs (Mudge et al., 2017). The majority of other articles focused on outcomes. These outcomes were increased social engagement and community integration (Eddy et al., 1988; Hart et al., 1987), functional improvement (Martin-Lemoyne et al., 2016), or a combination of psychosocial and functional benefits (Collins et al., 2006) with or without challenges specifically addressed (Herlache-Pretzer et al., 2017). An additional outcome
addressed was employment, with (Allen & Blascovich, 1996) reporting increased work attendance for individuals with mobility SDs.

**Psychiatric SDs**

Twenty-four articles focused on psychiatric SDs. Of these, 22 examine the use of SDs by veterans with PTSD, including a program evaluation and two literature reviews (Krause-Parello et al., 2016; van Houtert et al., 2018). Of the remaining two articles, one is a case study of a civilian with PTSD in which the authors identify the lack of knowledge informing placement efforts and possible negative impacts of the lack of coordination in rehabilitative and mental health services (Glintborg & Hansen, 2017). Another article surveys people in Australia who use SDs for mental health disorders and, in addition to exploring diagnosis and task work, reports that only 32% of the participants had learned about SDs for mental health disorders from doctors or service providers, with the internet and family being more common modes of initial knowledge.

The articles pertaining to veterans with PTSD suggest some emerging themes. Benefits included overall PTSD symptom reduction (O’Haire & Rodriguez, 2018), increased social engagement and activity levels (Krause-Parello & Morales, 2018; Lessard et al., 2018; Stumbo & Yarborough, 2019), and reduction of negative behaviors including substance abuse (Husband et al., 2020). Possible challenges included adjusting to life with a SD (Yarborough et al., 2018), demands of training (Stumbo & Yarborough, 2019; Yarborough et al., 2018), and unwanted attention (Krause-Parello & Morales, 2018; Lessard et al., 2018; Stumbo & Yarborough, 2019).

Concerns include the minimal empirical research currently available to show these SDs are effective, and the issue that many of the benefits most commonly reported are ones that are associated with pets and companion animals generally, not necessarily with psychiatric SDs.
specifically. Another concern is the lack of standards and knowledge regarding these SDs in rehabilitative approaches for mental health disorders (Glintborg & Hansen, 2017; van Houtert et al., 2018) and the challenges of implementing trials to provide more empirical data (Saunders et al., 2017).

**General SDs**

The remaining 26 articles fit under a general category. Eighteen focused on SDs as generally defined instead of a particular type of SD, and eight examined two or more types of SDs or SDs trained for multiple types of work for comorbid conditions. The articles addressing multiple types of SDs were aligned with the rest of the research in those areas, with dogs for hearing and mobility or physical disabilities most common (N=5). These articles suggested that different types of SDs may have different outcomes and that further research should be done to determine whether research is generalizable across categories of SDs (Hall et al., 2017; Lundqvist et al., 2018).

Topics addressed or reinforced by articles in this category included those on retirement and loss (Kwong & Bartholomew, 2011; Ng & Fine, 2019; Nicholson et al., 1995), pediatrics considerations (Davis et al., 2004), attachment and team bond (Fallani et al., 2006; Valsecchi et al., 2010; White et al., 2017), pairing and successful matches (Lloyd et al., 2016; Zapf & Rough, 2002), and ethics and welfare (Wenthold & Savage, 2007). Articles also examined more holistically focused outcomes with elements of task and psychosocial outcomes (Vincent et al., 2015) and factors contributing to the success of new handlers (Gravrok et al., 2019). Psychosocial gains are reported not only for handlers (Rodriguez et al., 2020), but also for family members and caregivers (Bibbo et al., 2019). Challenges and barriers included increased experiences of discrimination related to the use of a SD and negative public interactions.
(Fairman & Huebner, 2001; Mills, 2017), and (Lamontagne et al., 2020) suggested that, although rehabilitation professionals may report good general knowledge of SDs, their technical knowledge and confidence to recommend one or support the placement process of a handler may be lacking.

Figure 2-2

*Categories of Included Articles*
## Table 2-1

### Article Themes by Service Dog Type

<table>
<thead>
<tr>
<th>Type of Service Dog</th>
<th>Number of Articles</th>
<th>Range of Publication Dates</th>
<th>Primary Themes</th>
</tr>
</thead>
</table>
| General/Combined    | 26                 | 1993-2019                  | - Hearing and mobility commonly combined  
|                     |                    |                            | - Considerations for retirement and loss  
|                     |                    |                            | - Psychosocial benefits and barriers |
|                     |                    |                            | - Team bond  
|                     |                    |                            | - Handler perception of contributions/challenges  
|                     |                    |                            | - Impact of attacks on teams |
| Psychiatric         | 24                 | 2012-2019                  | - PTSD symptom reduction  
|                     |                    |                            | - Social engagement  
|                     |                    |                            | - Activity levels  
|                     |                    |                            | - Adjustment challenges  
|                     |                    |                            | - Lack of standards & knowledge |
| Mobility/Medical    | 21                 | 1987-2019                  | - Functional outcomes  
|                     |                    |                            | - Social engagement/community engagement  
|                     |                    |                            | - Challenges/barriers |
| Diabetic Alert      | 15                 | 2013-2019                  | - Accuracy of alerts  
|                     |                    |                            | - Handler perceptions of quality of life improvements and value of SDs |
| Seizure Alert/Response | 11             | 1999-2019                  | - Effectiveness of alerts  
|                     |                    |                            | - Handler perceptions of quality of live improvements  
|                     |                    |                            | - Evaluation of outcomes including frequency in seizures |
| Autism              | 9                  | 2008-2017                  | - Pediatric client, parents as handlers  
|                     |                    |                            | - Family/parent outcomes |
| Hearing             | 5                  | 1995-2019                  | - Impact on psychosocial functioning/community engagement |

### A Review of the Literature Pertaining to Practice Considerations

Practice implications of the current literature are reviewed in the sections below. To ensure a focus on the factors that are fundamental to the legal definition of a SD, the task work performed is considered as a primary intervention, while other benefits and impacts suggested by
the literature are considered as secondary interventions. This combination of task work and service dog related impacts, impacts related to the human-dog bond, and biopsychosocial outcomes describes the SD intervention. To provide information in a common clinical framework supported by the emerging research, a conceptualization of SD impacts within a biopsychosocial framework is presented in Figure 2-3 on page 41.

**Work or Tasks as a Primary Intervention**

One challenge is that, much as conditions that might be considered disabilities are not listed by the ADA, work or tasks are also not comprehensively defined. The ADA gives the following examples of work or tasks: guide work, hearing alerts, mobility work such as pulling a wheelchair, alerting and responding to seizures, reminding a handler to take necessary medication, or calming someone with PTSD during an episode. Other tasks and work are possible but must be directly related to the person’s disability and comfort or emotional support are not considered tasks. This means according to the ADA Standards, “Dogs whose sole function is to provide comfort or emotional support do not qualify as service animals under the ADA” (U.S. Department of Justice, 2011, para. 4).

Further complicating the topic of task work, some types of task work are clearly directly necessary to facilitate equal public access for handlers, while others are more secondary or would typically be used at home (such as waking a handler from a nightmare). The International Association of Assistance Dog Partners (2017) estimated there are 150,000-200,000 active SD teams worldwide, but as many as 10 million individuals could benefit from a SD. Wait-times for program trained SDs can be several years. Given SDs are a very limited resource, evaluation of the potential benefits of tasks as well as likely task utilization is essential to measure in order to make better recommendations for SD placement. At present, there is no such standard.
Task Related Outcome Research

Outcomes related to tasks is a relatively strong area in the literature; however, it is typically limited in scope to one type of SD or a specific task. The focus on tasks is most common for research centered on alert and response and on physical disabilities. Some task evaluation is isolated only to the tasks. For example, a dog that is trained for mobility support may be used to evaluate mobility-related outcomes such as reduction of exertion, increases in mechanical efficiency, or improvement in gait (Blanchet et al., 2013; Champagne et al., 2016; Fjeldstad & Pardo, 2017; Gagnon et al., 2013; Noguchi et al., 2012). It is important to note, however, that in these studies the trained mobility dog is being evaluated only in relation to physiological effect during the observation period and is not a SD placed with a participant. Similar research occurs related to seizure alert and diabetic alert tasks, where SDs, or non-SDs (such as pets or dogs that are in other, undefined roles) with natural alerting ability, are evaluated for accuracy of alerts. Research on diabetes alerts supports the possibility for reliable alerts to high and low blood glucose events, but performance varies greatly across dogs and there is a need for understanding of contributing factors for accurate alerting behaviors (Gonder-Frederick et al., 2017; Lippi & Plebani, 2019; Weber et al., 2016). Research on seizure alert behaviors also supports that dogs may alert to seizure events (Strong et al., 1999), but more information on false positive or negative rates is needed (Brown & Goldstein, 2011; Martinez-Caja et al., 2019). Studies surveying seizure alert SD handlers report increases in quality-of-life measures used (Catala et al., 2018; Kirton et al., 2008), as well as reduced seizure frequency (Brown & Strong, 2001; Catala et al., 2018; Strong et al., 2002). Available data in both of these areas of alerting are limited and rely on low patient numbers and predominately survey-based studies, risking recall bias.
Further research on task work and the development and refinement of outcome measures will be important to better understand the contributions of SDs. Particularly in some areas, such as for psychiatric SDs where the cause and effect are not yet understood, researchers have suggested that some tasks may in fact inhibit treatment goals when not carefully considered on an individual client basis (Glintborg & Hansen, 2017). Other tasks may jeopardize the welfare of the dog and this element is not yet well understood for some types of work (Coppingher et al., 1998; van Houtert et al., 2018). Handlers may not have the skills needed to appropriately work with and support the welfare of the SD (Coppingher et al., 1998) or there may exist unrealistic expectations of the SD’s behavior, potentially resulting in disappointment and lower reported satisfaction with the placement (Hart et al., 1995). A standardized evaluation of task-related functional outcomes and appropriate task utilization would lead to a better assessment of whether a SD would be an effective treatment for a client and assist in screening participants for SD-related research. Positioning the defining trait of SDs, trained task work, as the primary intervention would help to mitigate the pet effect that currently threatens the validity of SD research.

Pet Effect

The pet effect is an important consideration as it represents a threat to validity in SD research as well as a potential barrier to accurate recommendations for team formation. In their review of the literature on seizure alerting dogs, Catala et al. (2018) noted that it is unclear what effects relate to the assistance being provided by seizure response and alert dogs due to the high correlation of these effects with human-dog relationship research. They posit that health-related quality of life increases may be “a ‘simple’ pet effect” rather than a SD outcome (p.13). Winkle et al. (2012) also called for a need for better discernment between benefits of SDs in comparison
with pet dogs. It will be important due to the unique relationship between SD teams, and the SDs’ role as a working dog to evaluate how benefits may be altered compared to those of owning a pet, particularly since SDs present unique challenges that must be considered.

One example of this phenomenon is research measuring salivary cortisol in handlers, or in the parents of pediatric handlers. Viau et al. (2010) found a statistically significant decrease of morning cortisol awakening response in children with autism following SD placement, which was reversed upon the temporary removal of the SD. For parents of children with autism being placed with SDs, similar results were found (Viau & Champagne, 2017). A similar effect on cortisol awakening response has also been observed in veterans with PTSD placed with SDs. However, while these three studies did use waitlists for a control, none used a control group of individuals with pets or Emotional Support Animals (ESAs) in an attempt to measure the inherent effect of a dog in the home.

An interesting parallel is the adaptation of the guide dog placement model for adolescent handlers. Gravrok et al. (2018) explored the typical benefits of a guide dog and found that improved task outcomes such as mobility, safety, and independence would be difficult for adolescents to achieve. However, other inherent benefits associated with the pet effect such as increased confidence, companionship, and social support were still desirable. Since these expected benefits are associated with pet ownership and not necessarily with SD placement, the recommendation was a modification of typical SD placement in which an ESA would be placed to prepare for later use of a guide dog and to provide earlier pet-related benefits (Gravrok et al., 2018). This model allows not only for the individual to mature enough to be ready for the responsibility of handling a SD in public, but for better utilization of trained SDs to be placed
with those who will gain the most benefit from them. It also suggests a possible framework to explore and expand for assessment of most effective placements.

Unfortunately, much of the extant literature combines or conflates various animal-assisted interactions with SDs (Glintborg & Hansen, 2017; Sachs-Ericsson et al., 2002), and places a strong emphasis upon the benefits of animal companionship without controlling for the “pet effect” and functions that are specific to SDs. Further, it is clear that some of the research does not do enough to clearly define the differences between SDs and other different types of working dogs, and some available literature uses terms in interchangeable or confusing ways (Glintborg & Hansen, 2017) that could contribute to misunderstanding of the role of SDs. Another example is the geographical limitation with Audrestch et al., (2015) defining psychological/psychiatric assistance dogs somewhat inaccurately, perhaps due to the lack of utilization of these dogs in the UK. They stated that “Some of the duties carried out by these dogs include reminding their owners to take medication, helping to wake those whose medication makes it difficult to wake up, and providing support when feeling anxious” (p 431). As the ADA definition clearly states that emotional support is not considered a task, this last example is inaccurate, at least for the US. However, it does provide some validation to the lack of general knowledge regarding differentiating between types of working animals, in particular the anecdotal evidence of conflation of therapy animals and psychiatric SDs. van Houtert et al. (2018) noted in their scoping review of using SDs for PTSD that the results from available studies would be applicable to human-animal interaction in general, leaving this category of SD still disputed in efficacy.
Need for Further Professional Knowledge for Rehabilitation Professionals

By not stressing the importance of appropriate task work and evaluation of SD handler suitability, combined with the suspected lack of knowledge of providers (Lamontagne et al., 2020; Modlin, 2000; Winkle et al., 2012) and confusion regarding the definition and role of SDs, rehabilitation professionals do risk being complicit in fraudulent misrepresentation of a pet or ESA as a SD. It is also critical for standards of care and best practice standards to be established so that professionals can make recommendations inside their scope of practice without over-treating clients through recommendation of a SD where one would not be suitable due to positive bias, or under-treating by withholding a suitable recommendation due to lack of available assessment resources, lack of knowledge, or negative bias. Butterly et al. (2013) found that while providers expected positive outcomes from SDs whose placement they recommended, there was not consistent outcome assessment following placement, and placement assessment when performed was not standardized or empirically validated.

This knowledge is important not only for initial placement recommendation, but also to continue to provide multiculturally competent care over the lifetime of a team. Transfer training may cause identity shifts as the handler integrates new self-definitions and encounters changes in public perception (Sanders, 2000). This may include increased discrimination (Mills, 2017) and other challenges associated with SD use. Over the course of the team’s working life, other events are likely to impact the team and educated professionals will be prepared to support the team.

One example of this type of event is a dog attack on a team. Research in the UK suggests an average of approximately 11 attacks on guide dogs a month (Moxon et al., 2016) and that over 70% of handlers reporting attacks also report negative impacts such as physical and emotional impacts on handlers, the death of the SD, or injury or fear reactions of the SD forcing
its retirement. In some cases, these consequences caused handlers not to seek another SD placement or to experience lack of meaning or purpose. Increased distrust of dogs and dog owners could be highly disruptive to routines and overall wellbeing even when the SD was able to continue to work (Marquès-Brocksopp, 2015). Retirement and death of SDs are important elements to address from an informed place, regardless of the cause of these events. Due to the unique relationship of a SD team, research has found that retirement or death causes grief responses consistent with the loss of caregiving relationships (Kwong & Bartholomew, 2011). Research in the UK by a guide dog program also suggested that the relationship with the program and exact circumstances of the termination of a placement or loss of a SD can impact this transition, with high distress levels found across participants who were part of a partnership that had ended in the previous year (Nicholson et al., 1995).

**Evaluation of Handler Suitability**

While evaluation considerations related to temperament, behavior, and various predictive factors for the dogs within a SD team exist (Asher et al., 2013; Murphy, 1995; Serpell & Hsu, 2001; Tomkins et al., 2011), there is no current consensus on predictive factors for positive outcomes that may exist relating to the handler. Successful team pairing between handler and dog is not yet well understood (Lloyd et al., 2016), and there is no standard client assessment or evaluation available.

Contraindications considered by SD programs are typically rooted in concern for the welfare of the SD. Therefore, if the client does not have a safe and stable home environment, is actively suicidal, or is experiencing severe psychosis symptoms considered uncontrolled, they may be excluded by a program. However, no comprehensive guide or standard is available, and no empirically-based assessment is available to evaluate a client as a suitable handler.
A three-step common-sense guide for determining basic handler eligibility would consider the following (Pierce, 2018): 1) Is my client disabled under the definition set forth by the ADA?; 2) Is my client a suitable candidate for a service animal? Given the current lack of screening measures, at present this question encourages consideration of whether any animal, whether a SD or pet, would be safe in the home environment; and 3) Are there trained tasks a SD could perform that would help mitigate my client’s disability? If all questions can be answered with a yes, a SD placement might be considered with appropriate consultation and evaluation of the literature to determine the suitable tasks and psychoeducation of the client about realistic expectations and potential challenges. If either of the first two questions are answered with a no, evaluation can stop immediately. The development of empirically-based assessment tools and standards of care are obviously needed in this area, as well as assessments of the current knowledge of providers so as to better provide relevant resources.

**Attachment and Team Bond: A Relational Secondary Intervention**

Attachment and team bond are essential to improve the performance of task work and reduce stress on the members of the team. This forms the basis for a team dynamic that becomes a relationally focused secondary intervention and is highly beneficial to the handler. It is also logical that this bond, once formed, contributes to many of the psychosocial outcomes experienced by handlers. Facilitating the formation of the team dynamic in rehabilitation settings and being able to adequately evaluate it to describe participant factors in research is therefore essential.

Because there is no standardization of training programs for SDs, each program will handle transfer training and team formation in a different way in line with their organization’s format, which can range from a several-day intensive training to meetings over a period of
months. At present, little information is available that describes or evaluates the formats and possible interventions programs used in transfer training. Program evaluations either focus on dog selection and eventual outcomes (Kirton et al., 2008) or are personal narratives of a handler that gives insight into one program’s structure and their own experiences (Warnath & Seyfarth, 1982). Level of follow-up varies greatly between programs and therefore the process of team formation may be an area in which rehabilitation professionals with SD knowledge could provide valuable support and helpful interventions to handlers who may be encountering challenges. The needs of owner-trainers are likely unique, particularly around the transition from a Service Dog in Training (SDiT) to a SD. Handlers may encounter a lack of confidence at this transition point and may not have as much support as handlers working with a program.

Very little research has explored successful and unsuccessful SD pairings. Lloyd et al. (2016) found that this is a complicated area through their study of 118 guide dog pairings. They found that 43 of the dogs were returned before retirement age, typically for behavioral concerns. However, handlers did not always consider dogs that were returned to have been an unsuccessful match, and not all handlers who kept dogs until retirement characterized the match as successful (Lloyd et al., 2016). This may reflect the multifaceted nature of integrating a SD into a handler’s life, particularly for new handlers. This transition presents challenges in adjusting to the SD behavior and capabilities, a new role as a handler and new skill acquisition/implementation, and renegotiation of social interactions (Gravrok et al., 2021). The team dynamic is also unique. Due to the interdependent nature of a SD team bond an anxious attachment style in the handler may predict better quality of life outcomes when attached to a SD (White et al., 2017). Naderi et al. (2001) found that among guide dog teams, the handler and SD at different times are initiating or leading and form a cooperative team. It is known within training and placement organizations
that certain teams do not work out, and some handlers seem less able to form the type of attachment needed in the team, leading to failures of placements. Further exploration of whether team orientation in the handler may be a predictive outcome and how to evaluate this and other traits connected to team formation is warranted.

In their exploration of the experiences of first time SD handlers, Gravrok et al. (2019) found four main factors that predicted whether the handler was able to successfully work with a SD partner. The first was the nature of the disability, with more complex disabilities or those that are less predictable in symptom presentation presenting more of a challenge. This seemed to be related to challenges in maintaining consistency needed by the SD due to these fluctuations. The second factor identified was related to mental health symptoms, with challenges related to concentration, motivation, or assertiveness in some cases. These symptoms often contributed to behavior issues in the SD due to lack of reinforcement of training and led to a decrease in perceived benefits in other cases when symptoms were high. A third reported factor was social support: participants who are not well accepted by their community or social networks, or who encountered access challenges and discrimination, experienced more challenges. Finally, some of the dogs in the teams presented challenges, typically through inability to perform their primary intervention through task work (such as failing to reliability alert) or immaturity at placement causing conflict (Gravrok et al., 2019).

**Psychosocial Outcomes**

A common psychosocial outcome reported by handlers is improvement in social engagement due to the socializing role of the SD. Social acknowledgement for people with physical disabilities typically increases when a SD is present, compared to the individual with a disability being alone (Eddy et al., 1988; Hart et al., 1987; Mader et al., 1989). SD handlers
across all categories self-report a better sense of social integration following placement with a SD (Crowe et al., 2014; Fairman & Huebner, 2001; Guest et al., 2006; Herlache-Pretzer et al., 2017; Winkle et al., 2012).

Other psychosocial outcomes reported by veterans with PTSD SDs include substance use reduction and reduction in suicidal impulses (Yarborough et al., 2018) that appeared to be based on the accountability of the handler in the team and responsibility for the SDs welfare. Handlers report improved sleep which may be connected to a task of nightmare interruption (Yarborough et al., 2018). In studies examining the impact of psychiatric SDs, PTSD symptom reduction (Husband et al., 2020; Kloep et al., 2017; O’Haire & Rodriguez, 2018; Stumbo & Yarborough, 2019; Whitworth et al., 2019) and decrease in depression (Kloep et al., 2017; Stumbo & Yarborough, 2019) are reported, as well as increased social engagement (Kloep et al., 2017; Lessard et al., 2018; Whitworth et al., 2019), increased activity levels and engagement (Lessard et al., 2018; McLaughlin & Hamilton, 2019; Stumbo & Yarborough, 2019), and overall quality of life improvements are reported by handlers (Kloep et al., 2017).

Across types of SDs, a decrease in anxiety is often reported (Pesterfield et al., 2016), in addition to an increase in feelings of safety (Burrows, Adams, & Spiers, 2008; Taylor et al., 2013; Valentine et al., 1993). However, the cause of these outcomes is often unclear, as is whether they are linked to the SDs’ task work, the specific relationship and bond between handler and SD, or a pet effect. Self-esteem, self-efficacy, and contentment may also increase (Valentine et al., 1993) along with improvements to internal locus of control (Allen & Blascovich, 1996). Anything the dog passively influences through their presence can here be considered a secondary outcome. If these outcomes are more clearly linked to task work through future research, they would be connected to the primary intervention. These secondary benefits
are important to understand and may help to identify predictive factors for better team formation or contribute to developing transfer training interventions, but cannot be said to be directly related to the unique influence of SDs until more evidence controlling for other variables is available.

**Differences in Team Outcomes**

Some research suggests that different functional outcomes may exist when comparing types of SD teams. Hall et al. (2017) found that while both hearing dog handlers and physical (mobility) SD handlers reported increases in quality of life, this increase was statistically significant only for the physical SDs and that physical SD handlers also reported higher levels of improvement in other areas being measured such as social interactions and recreational activities. Differences in public perception of different types of SDs has not been explored. However, Hunter et al. (2019) suggested that in the workplace the visibility of the task work the SD performs and the perception of the disability they are trained to assist is likely to impact the reactions of colleagues, and ultimately the degree of inclusion the handler experiences. The difference in public perception of visible and invisible disabilities and the use of a SD was explored by Mills (2017), who found that those with invisible disabilities were more likely to experience higher levels of discrimination, intrusive questioning, and skepticism about the legitimacy of their disability.

Different categories of handlers may also experience the public perception and behaviors around SDs differently. Glenn and Thorne (2015) found that in considering the elements SD handlers reported related to successful workplace access, mobility and medical alert SD handlers had different priorities, with mobility handlers more focused on co-worker preparation and legal knowledge. The available research related to social interactions and individuals with physical
disabilities shows an increase in social acknowledgement when a SD is present compared to control groups without SDs (Eddy et al., 1988; Hart et al., 1987; Mader et al., 1989). The research presents this as positive, and as participants not experiencing being ignored or avoided as they might be when in public alone. However, the research shows an increase in acknowledgement that typically centers on the SD, as well as inappropriate behaviors such as touching or speaking to the SD (Eddy et al., 1988). Other research suggests handlers are disturbed by intrusive questioning and other behaviors (Mills, 2017) and lack of public respect toward the working SD (Fairman & Huebner, 2001). Much as the suggestion that some task work may in fact be counter to certain treatment goals, an increase from one instance of acknowledgement on a public outing to eight such instances with a SD as Eddy et al. (1988) found may be disruptive for some individuals.

**Challenges and Barriers**

One of the most common challenges for SD handlers involves the lifestyle adjustments involved in pairing with a SD, which may or may not be well supported depending upon their treatment team (Hart et al., 1995; Rodriguez et al., 2020; Yarborough et al., 2018). The demands of training and training maintenance also often seem to be underestimated prior to placement or to create challenges during placement (Stumbo & Yarborough, 2019; Yarborough et al., 2018). An important consideration is that handlers with invisible disabilities can no longer pass as not having a disability once placed with a SD (Mills, 2017). This increase in visibility of the disability through an external aid may have an impact on identity, and a SD is likely to have a unique impact due to the complexity of both public perception and the internal experience of handlers in a team (Sanders, 2000). The discrimination handlers are likely to experience regardless of disability (Mills, 2017) is also likely to be unanticipated by those on a waitlist for a
SD (Rodriguez et al., 2020). This may be the first time some individuals have been strongly recognized as and treated as “other” by those around them, and they are likely to immediately experience a drastic increase in social attention that is largely focused on the SD partner (Eddy et al., 1988). Handlers also have to learn to self-advocate and cope with public access issues (Rodriguez et al., 2020) in addition to this increase in unwanted or inappropriate public attention that may make some handlers uncomfortable (Fairman & Huebner, 2001; Lessard et al., 2018; Stumbo & Yarborough, 2019).

Another area of consideration is that of cost. The initial cost of obtaining the SD may vary greatly depending on how it is acquired and ongoing care expenses in food, veterinary bills, and, potentially, maintenance training must also be considered. Some studies have found that handlers see cost as a barrier or challenge to owning a SD (Bibbo et al., 2019; Glenn & Thorne, 2015; Lessard et al., 2018; Rodriguez et al., 2020) while other research suggests that SDs may be cost-saving due to reduction in medical care or the cost-effectiveness of quality-of-life improvements (Glenk et al., 2019; Lundqvist et al., 2018). It is also likely that costs and benefits may vary based on type of SD, for instance with support available in some locations for SDs such as guide dogs (Lundqvist et al., 2018) while newer or less used types of SDs may not present as many options for cost-offsets. For programs that rely on fundraising, it is important to consider whether there may be discrepancies between the external funds available for different disabilities and whether the SD is released before funds are raised as these policies are not standardized.

Limitations of the Research

There are a number of limitations in SD research currently. One consideration is that this is a relatively recent area of research and much of the research is qualitative or quantitative with
weak study design (Winkle et al., 2012). Small participant sizes, a lack of standardized outcome measures directly related to SDs, and few longitudinal studies all threaten validity of the research in this area. Lack of standardized terminology and inconsistency in training standards combined with poor descriptions of participant selection and poor definition of the intervention (the specifics of the SD training, role, and partnership specifics) have all been identified as significant barriers to the quality of the current research (Winkle et al., 2012). Modlin (2000) suggested upon examination of the early research that there may be a lack of balanced analysis as only one study at that time found a negative result, and that study did not present any benefits whereas other studies only presented positive results and often did not fully define the intervention.

While the pet effect has been mentioned and alluded to in research, no studies appear to be attempting to control for this and there is not an understanding of whether the relationship with a SD might provide different effects than a pet (Collins et al., 2006; Winkle et al., 2012). This issue raises concerns that the benefits, particularly psychosocial benefits, but potentially some physiological benefits as well, may be resulting from the presence of a dog rather than from a SD specifically, though presented in the research as a positive SD outcome (Kloep et al., 2017). The exact cause and effect of SD outcomes for PTSD in particular have previously been stated to be unknown (Krause-Parello & Morales, 2018) and existing outcome measures do not always appear to capture the impacts reported by handlers (Rintala et al., 2008). In seizure alerting SD research, it is also noted that the effects are not fully understood and the quality of the research overall is generally poor with small sample size and a reliance on surveys or participant self-reports and results that may be attributed to the pet effect rather than SDs specifically (Catala et al., 2018). It is possible in some cases recommendations of pet ownership
or other animal assisted therapy interventions may be appropriate in some of these cases to avoid challenges presented by SDs.

Other limitations include the difficulty in conducting a blind investigation into SDs, resulting in potential participant or researcher bias and difficulty in isolating the intervention because it represents a fundamental change to all areas of life. The research suggested outcomes may not be generalizable across types of SDs (Hall et al., 2017), and individual variation will further impact generalizability. The literature also suggested that some important constructs, for example successful matching or partnerships, are not clear-cut and may not be captured accurately by available research (Lloyd et al., 2016).

**Theoretical Foundations for the Study**

At present, there is no theory that specifically addresses SD handler needs or SDs as an intervention. There are also no assessment or outcome measures that might point to a specific framework that would be most appropriate. Therefore, given the interpretation of task work as a primary intervention and psychosocial support as a secondary intervention, I have presented an altered biopsychosocial assessment model as might relate to SD work specifically. This may help those less familiar with SDs understand the intervention in a common model, and may also help to frame results.

**Biopsychosocial Assessment**

The biopsychosocial framework for medical care was pioneered by George Engel in the late 1970s. He saw a need for a framework that would move medical care away from a biomedical model and account for the interactions between biological, psychological, and social domains of human experience (Engel, 1980). The biopsychosocial framework has continued to
be expanded and adapted, and is a common contemporary approach to assessment and treatment considerations in medical and mental health practice as well as in research (Adler, 2009).

A biopsychosocial approach is helpful in evaluating the complex impacts of a SD as an assistive device for a SD handler and to interpret the emerging literature related to tasks and treatment outcomes of SDs. Continuing the framework of considering the SD’s task work as a primary intervention, this would fall primarily within the biological domain. Even SDs who are doing task work for psychiatric disabilities are typically responding to physical triggers for their trained task work. These might be behavioral cues such as anxious fidgeting or lack of eye contact and movement that could indicate dissociation, or biological manifestations of psychological symptoms such as an increased heart rate indicating panic.

The psychosocial benefits that have begun to emerge in the available literature are then considered as a secondary intervention that is based in the team dynamic as well as the reactions to the SD team by the people and settings the SD handler regularly interacts with. This model demonstrates the importance of considering a holistic approach to assessment for SDs as well as when working with existing SD handlers. Figure 2-3 shows how SD impacts may be conceptualized within the biopsychosocial model.
Figure 2-3

Conceptualizing Service Dog Impacts in a Biopsychosocial Framework
Stages of Treatment

In absence of other established theories or frameworks, the following proposed treatment model has been used in this study to frame the questions and categorize responses so they are tied to specific stages of service provision a SD handler might experience. This is based loosely on other treatment models in the field and attempts to account for the major process-based milestones a SD team will move through.

Figure 2-4

Visualization of Stages of Treatment
CHAPTER 3: METHODOLOGY

The purpose of this study was to obtain information and perspectives of experts and stakeholders in the field of SD implementation into rehabilitation treatment. The main goal was to identify barriers and facilitators to SD partnerships and generate considerations for development of standards of care for SD handlers.

Research Design

Delphi Method

The Delphi method was developed by the Rand Corporation in the 1950s. It was originally designed as a forecasting method to identify strategic weaknesses in armed conflict, especially in the event of nuclear war. Two of Rand’s mathematicians, Norman Dalkey and Olaf Helmer, were most involved in developing the method. Their work was an effort to balance what they saw as the extremes of prediction, knowledge, and speculation, through the integration of opinion (Dalkey & Helmer, 1963). Dalkey and Helmer also described opinion as wisdom, insight, or judgment. The goal of the Delphi method was therefore to provide an efficient way for experts to share opinions and insights anonymously, and to arrive at a consensus on an issue.

Historically, there are three main categories of Delphi studies. While many modifications to the Delphi method have been used, there is no difference between the three types of Delphi studies but their purpose and goals. Classical Delphi studies are used to forecast the future, as originally implemented by the Rand Corporation. Policy Delphi studies address a specific problem or provide means for analysis of a social situation (von der Gracht, 2012). Decision-Making Delphi studies are used specifically to achieve better decision-making outcomes and may be historically focused to evaluate past events.
One of the advantages of the Delphi method is that it allows for many goals and for modifications to address specific topics. It can be useful in instrument development, development of programs, and a more comprehensive understanding of a topic (Vázquez-Ramos et al., 2007). In their extensive list of “surprising uses” of Delphi studies in the literature, Linstone and Turoff (1975) included such applications as “planning university campus and curriculum development,” “exposing priorities of personal values, social goals,” “distinguishing and clarifying real and perceived human motivations,” and “putting together the structure of a model” (p. 4).

**Key Features of the Delphi Study**

**Anonymity**

Anonymity is one of the defining features of a Delphi study. Dalkey and Helmer (1963) observed that collective consensus derived from face-to-face communications was often less accurate than individual opinions. This understanding has been attributed to the psychology of groups, and various interpersonal phenomena including silent members and pressure to conform to opinions of other members, particularly where rank or other dynamics may influence individuals. Therefore, the anonymity of members was essential to provide a different group collaboration process than those that were already happening face to face and to protect members who might have opinions seen as extreme. Delphi studies have been used in many fields and for many applications including advanced technologies and policy development where members being able to contribute and discuss without being known by others has had advantages to ensure all ideas are expressed (Avella, 2016).
Panel of Experts

This anonymity is afforded to a panel of experts, who are assembled without concern for geography and through criteria appropriate to the question and their profession or background (Avella, 2016). Delphi studies have most often been done remotely, first through mail correspondence and now through electronic means. Panel size varies greatly, but panels of 10-100 members comprising two or three groups of expert members are typical (Avella, 2016). The selection of members is purposive to obtain expert knowledge, though there has been some debate as to what might constitute an expert (Hasson et al., 2000). In general, these expert members or participants should have knowledge in the area of the question, time and interest to contribute, and professional qualities such as would be recognized by others with their background. In areas where research-based criteria can be identified in the literature such criteria should also be considered (Sekayi & Kennedy, 2017).

Feedback

The role of the panel of experts is to provide and receive feedback. The Delphi panel moves forward in a series of rounds, and with each round, experts contribute opinions and insights. The format of the opinions may vary based on the type of Delphi design being used, but the feeding back of this information into the panel by the researcher is a key element shared by all Delphi modifications. In this way, the group opinions are documented by the researcher and presented to the panel for further commentary. The mechanism of feedback allows for consensus or for the facilitation of debate when seeking to explore dissensus (Mullen, 2003).

Consensus

Consensus has been considered a key feature of Delphi studies, particularly early forecasting studies (Dalkey & Helmer, 1963; Linstone & Turoff, 1975) and the Delphi method is
frequently presented as a *consensus method* (Hasson et al., 2000). Importantly for this study, however, not all Delphis have a goal of achieving consensus. Policy Delphis often have goals associated with determining all options available or trying to generate as many disparate opinions as possible (Linstone & Turoff, 1975).

Consensus/agreement and stability are two related concepts that are both important to consider when consensus is a goal of a Delphi study. Stability is the point at which responses between rounds have become consistent and no greater agreement among the panel is reasonably expected (Mullen, 2003). Stability may be established as a stopping criterion, particularly where consensus is not expected. It is also important to note that consensus does not mean 100% agreement. Fifty-five percent to 100% agreement may be considered acceptable depending upon the Delphi and the topic, and 70% is considered the standard (Avella, 2016; Vernon & Vernon, 2009). von der Gracht (2012) notes that this is an area of the Delphi method that has never been standardized and that is often not well explained by researchers, with different definitions and measures for consensus being used.

**Appropriateness of the Delphi Method for the Current Study**

Qualitative research is appropriate to examine themes and questions and there has not been enough research to conduct a quantitative analysis of effective practices related to SD placement. Delphi allows for using a narrative approach applied to a group of stakeholders in the area of SDs to determine whether there is a consensus related to SD practices. A Delphi approach also allows for the identification of interesting opinions and perspectives that may not achieve consensus and instead warrant further exploration. Due to the anonymity afforded by the model, participants may be more willing to contribute opinions that might be unpopular or which
they would not want to be associated with, but which should be examined and dealt with by the group.

A challenge in the area of SD research has been the lack of interdisciplinary efforts. The ability of a Delphi design to facilitate sharing of knowledge and generation of new ideas across disciplines (Pill, 1971) is one reason this methodology is highly suitable to these questions at this time. Avella (2016) suggested that in appropriate and careful selection of groups and participants, misconceptions may be corrected and knowledge may be gained through the process of the research. It is also possible that through the enhancement of qualitative data collection this process may be better illuminated.

It is notable that Delphi studies have been used in nursing and healthcare to identify research priorities and to develop clinical and practice guidelines (Mullen, 2003) and is therefore well suited to the purpose of this study. Within rehabilitation research, Delphi studies have been used to develop policy related to service access (Baker & Moon, 2009), to identify competencies required for specialty areas (Hawkins & Austin, 1990), and to support evidence-based criteria for the use of assistive technology and disability supports (Atkins et al., 2008).

**Modifications to the Delphi Method**

**Typical Delphi Study Design**

The standard Delphi study has four rounds, or phases, though other numbers of rounds have been used by researchers. In Round 1, the subject is explored and panel members contributed pertinent information (Linstone & Turoff, 1975). There are many approaches to this phase. Sometimes this initial round is closed, with a questionnaire developed by the Delphi researcher provided to participants for commentary (generally ranking priorities). This may be problematic due to researcher bias and precludes some of the initial data collection that could be
generated by the Delphi panel. Given these concerns, it is common to use an open-ended questionnaire for the first round with 1-5 general questions related to the topic and written with consultation (Avella, 2016; Hasson et al., 2000; Mullen, 2003). Other modifications for Round 1 include beginning with interviews or presenting an existing policy or program for commentary, in accordance with the nature of the question being posed (Avella, 2016). Regardless of the data collection method, the researcher then compiles the initial responses, and using content analysis techniques creates a more structured questionnaire for Round 2.

In Round 2, the researcher gains an understanding of where members agree or disagree and how the group collective views the issue (Linstone & Turoff, 1975). In this round, the panel is provided the questionnaire generated from the initial responses and asked to review the summary. The panel may be asked to rate or rank-order the items to establish priorities or may be asked about their level of agreement with statements in a Likert scale approach. The results from Round 2 are again compiled by the researcher, and another questionnaire developed for Round 3.

In Round 3, differences and disagreements are evaluated and explored by the group through feedback (Linstone & Turoff, 1975). The Round 3 questionnaire is distributed, along with a summary of the panel’s feedback from Round 2 and the panel is asked to provide responses. The process may continue after this round if predetermined stop criteria have not been met, but Delphis are often three or four rounds.

Round 4 provides the final evaluation and analysis (Linstone & Turoff, 1975). At this point, the final results are summarized and distributed to the panel. This includes the final list of items, ratings, or other information collected about items, minority opinions, and items which achieved consensus (Hsu & Sandford, 2007).
Qualitative Delphi Modification

Due to the nature of the research question and the desire for more qualitatively rich data to better understand group processes and fully capture opinions, the qualitative modification described by Sekayi and Kennedy (2017) was used in this study. Qualitative reporting of the eventual endorsements, group dissensus, and other elements is important, and the use of this model provided more narrative data early on and also outlined methods of coding and reporting the qualitative data gathered in Delphi rounds. The authors note that the question of how to handle data in between rounds of any Delphi was not well supported in the literature. The main argument for this type of qualitative approach is that it preserves more of the initial nuance of the brainstorming from Round 1 throughout more of the process, rather than shifting toward a quantitative treatment which may shut down perspectives too quickly (Sekayi & Kennedy, 2017). The approach to each round of the study is described below, and examples from the data are provided in Chapter 4.

In Round 1, the open-ended questionnaire is sent out. Sekayi and Kennedy (2017) then recommend open coding to label statements, followed by axial coding to group statements, and then generating a list of statements to use in Round 2. It is important that the statements generated communicate a group response, which may require some rewording from individual responses. Language as used should be maintained wherever possible, and over-reduction of the statements avoided so the “uniqueness of individual statements should not be sacrificed” (Sekayi & Kennedy, 2017, p. 2758).

Round 2 differs most from the traditional Delphi model. In this round, panelists are sent the statements from Round 1 and rather than asking for them to endorse these statements at this stage, they are asked to leave the statement as-is if they have nothing to add or no experience
with the statement, or to make modifications to the statement in a way that makes it applicable for them. For example, a participant might make an addition to a statement, or recommend dropping part of a statement. In this way, more information about individual differences and opinions is generated, and the final list of items may be more robust because of these modifications (Sekayi & Kennedy, 2017). Opinions that are not widely endorsed may also be better understood and reported in the appendix of the final report due to the record of these individual participant responses. The researcher compiles modifications and either revises statements or creates new statements as appropriate.

The qualitative modifications conclude with Round 2. Round 3 returns to the typical Delphi structure, with endorsement of panelists requested and then final results disseminated for Round 4.

**Role of the Researcher**

In a Delphi study, the role of the researcher is slightly altered from the researcher as instrument common in qualitative approaches. Avella (2016) defines the role of the researcher initially as that of “planner” and then as a “facilitator.” The potential for bias from the researcher is mitigated through the researcher acting as a facilitator of debate within the participant group and as a recorder of data. The constant communication and feedback between panel and researcher provide internal process auditing. “Contributor” is not a responsibility of a Delphi researcher and should be carefully avoided (Avella, 2016).

**Participant Selection and Recruitment**

**Number of Participants**

There are no formal guidelines for the number of participants in a Delphi study and the number of participants needs to be considered in reference to the makeup of the sample as well
as the nature of the question. Classical or forecasting Delphis with homogenous samples where opinions are likely to align have used panels as small as three. In a more heterogeneous sample or one made of several groups who may not agree where a goal may not be consensus but exploration of opinions and available options, the number should be higher (Sekayi & Kennedy, 2017). This increase in sample size allows for groups to be balanced so that one group does not drown out another in the analysis, somewhat mitigates potential drop out, and increases the chances that outlier ideas and opinions will be presented and addressed by the group.

It is suggested in Delphis where the qualitative and narrative aspects of the brainstorming process are highly valuable to the researcher, or where the qualitative component may be enhanced, that participant groups above 30 generate too much data for iterative analysis and may become unmanageable (Sekayi & Kennedy, 2017). While many early Delphis used panels as small as three experts, Linstone (1978) in evaluating the relation between size and accuracy determined that a minimum panel size is seven, with accuracy suffering below that number. In identifying stakeholders for this topic, possible groups included SD professionals, researchers, rehabilitation professionals, and SD handlers. Two to three groups are typical (Avella, 2016). While these groups may all have relevant input, identifying those groups most likely to have expertise as well as professional or personal concern may be challenging. For example, it may be difficult to find rehabilitation professionals or counselors who are suitably invested in this topic area or who have enough knowledge to contribute meaningfully. Delphis that use more representative samples have sometimes used extremely large samples into the hundreds or thousands and begin to more closely resemble opinion surveys (Mullen, 2003).

Other considerations in determining size include mitigating dropout and encouraging diversity of perspective. Higher dropout rates are associated with larger panels, with Reid (1988)
favoring 20 as a maximum size at which membership was well retained. For qualitatively focused Delphis, Sekayi and Kennedy (2017) found 20-30 participants to be a range in which diversity was present and data generated was manageable. Although there is no clear standard, given the proposed groups and qualitative focus I set a target of up to 20 participants.

**Relevant Participant Characteristics**

The primary criteria for Delphi experts will relate to the standards of the profession they are in or their knowledge in the topic area. However, some general characteristics of participants are described in the literature and should also be considered. A primary consideration is the interest of the potential experts in the topic to be explored. This factor reduces dropout and prevents consensus pressure which may eliminate debate in middle rounds. Interest can be determined through membership in groups, publication records, or through questions asked in the initial communication with potential experts (Avella, 2016).

The next important universal characteristic is the time panel members have to devote to the research study. This consideration is complicated by the difficulty researchers may have in estimating the time commitment due to the need to receive expert input, analyze the data, and report back in between rounds as well as a lack of ability to predict at the outset what the expert panel may generate in the early rounds. Avella (2016) suggested that education of the members regarding participant expectations at the outset of the research may reduce attrition.

Another consideration is the participant’s ability for written communication, as panel members must be able to clearly communicate their rationale and additions to the rounds. This means participants must be able and willing to clearly and fully articulate their input so that the process flows smoothly and other panel members can comment meaningfully (Avella, 2016).
Relevant exclusion criteria include potential participants who are known personally to the researcher, and anyone whose knowledge of the topic is primarily focused outside of the United States, so that there can be a standard definition and understanding of “Service Dog” and understanding of uniform legal implications among participants.

**Participant Groups**

Qualification as an “expert” for invitation to a Delphi panel may vary between groups and it is advised that when recruiting a broad range of individual perspectives, the criteria should include measurable characteristics each participant group would consider to define expertise (Avella, 2016). Participants overall and within each participant group are recruited purposefully to apply their particular knowledge to the problem, and therefore the criteria should highlight that relevant knowledge (Hasson et al., 2000). The current study was designed to include four groups of key stakeholders: SD Professionals in both direct and indirect service roles, SD handlers, and rehabilitation professionals or counselors. These groups are introduced in further detail in the sections that follow. For the recruitment email that includes the specific requirements for each group, see Appendix B.

**SD Professionals (Direct Service Providers)**

SD professionals is here taken to mean the range of individuals associated with the SD industry. This includes individuals (owners/operators, board members, employees, volunteers) associated with for-profit or not-for-profit SD training and placement programs, as well as independently operating private trainers who work with SDs and SD handlers. In a conceptualization of stakeholders, this group was labeled as “SD trainers.” However, on further reflection, limiting the search to trainers is likely to limit potential participants unnecessarily and may not give the best expertise for the panel.
SD professional criteria for this “direct service provider” group included experience working (paid or unpaid) with both SDs and with handlers/clients. Applying these criteria was important because many people associated with SD organizations (for example puppy raiser volunteers or trainers in prison programs) have a high degree of experience with training SDs but may not regularly see the application of the training theories through working directly with the SD team. The titles of people associated with programs who are involved with transfer training or otherwise are able to observe team interactions, rather than only SD behaviors, may vary depending upon the program structure. This made it necessary to provide the criteria and allow programs to determine what people in their organization have these job duties. Criteria specific to this group included at least one year of experience in a role dedicated to the training and support of or other close contact with handlers being placed with SDs, and/or ongoing assistance to already placed teams. Additionally, at least 5 years of experience in the service dog industry in any type of role was required.

**Indirect Service Providers/Researchers**

This group represents a variety of perspectives of those who work in the SD industry or do research on SDs but do not necessarily work directly with teams/handlers. They may, however, contribute a better big picture or policy focused view than the other included groups. A reasonable criterion for the researcher group would be one or more peer-reviewed published articles that focus primarily on SDs and, included in the article there is an accurate definition of SDs. Researchers who have published more than one article on the topic or who demonstrate higher levels of awareness of research quality would be more desirable. Other participants in this group were identified by their job description and the number of years in that job, with particular
interest in recruiting individuals involved in ADI policy creation or site visits, and lawyers and grant writers for organizations.

 Handlers

Patients are increasingly being included as key stakeholders in the development of medical care guidelines, and given the client-centered and empowerment-focused nature of rehabilitation practices and of rehabilitation counseling, in particular, SD handlers were an important group to include in this study. Handlers are likely to identify different barriers and concerns than professionals, and this could present interesting debate and opinions that would not be discovered in a more homogenous group of professionals without experiential knowledge.

There were two obstacles to including handlers in the present study which needed to be overcome. The first was that recruitment of handlers is challenging. As there is no registry or certification for SDs, identifying handlers is very difficult. The privatized nature of programs means it is difficult to use them as a recruiting vehicle, and there are no known physical locations besides training programs where handlers frequent based on their identity as handlers. Much of the handling community exists online in forums and social media, and this presents many obstacles to recruitment depending on group openness, rules, and whether permission can be gained for recruiting attempts.

Additionally, there are no set criteria that would set a handler apart as an “expert” handler. In this capacity, handlers were conceptualized through the “expert” definition of anyone with relevant input (Pill, 1971). The criteria for handlers were to be a past or current SD handler of at least 5 years. This mirrored the length of experience set for the other groups as well as having advantages specific to SD handlers. It may take a year or two for a team to hit a working dynamic, and if working with a program there may be a transition period of part time handling
outside of the handler’s normal environment. Teams also encounter new challenges as different circumstances arise (i.e., travel by various methods, important events, changes in work or housing, or disability presentation changes). Preference was also considered for those who had had multiple SD partnerships or multiple training experiences as they could provide more insight into successful pairing and transfer training through contrast as well as insight on end of partnership needs.

Estimated numbers of owner trainers are higher than those through programs, particularly where there may be barriers to a program dog based on disability type or other factors. Therefore, a mix of owner and program trained SD handlers, as well as types of SD tasks, was determined to be most appropriate to have diversity of viewpoints. A representative sample is not the goal of a Delphi study’s panel formation (Mullen, 2003), but given the lack of available reliable demographic data, it would be impossible to capture a representative sample. The focus for recruiting this group was primarily the amount of experience participants could contribute and secondarily the diversity of those experiences.

**Rehabilitation Professionals/Counselors**

Professional criteria here is appropriate professional certification or licensure (a CRC, LPC, or relevant equivalent) and five years of experience. Counselor educators were considered as a possible source of participants due to the focus on ethics in training programs. There was concern about whether rehabilitation professionals and counselors could be identified who have experience with or knowledge of SD integration, or a realistic self-assessment of the depth of their knowledge in this area. The ability to find professionals who have actively participated in team formation and have a high degree of knowledge from this experience seemed unlikely. Therefore, a short knowledge assessment was developed with several critical items (see
Appendix A) for use in recruiting this group. This allowed for the focus to be on contributing knowledge of assistance technologies or clinical interventions overall, paired with general knowledge of animals through personal experience or exposure to animal-assisted therapy.

**Recruitment Procedures**

Participants identified through the selection criteria relevant to their group were contacted via email with a description of the study (see Appendix B). This document included an explanation of goals and procedures of the Delphi study stressing the anonymous nature of the approach and the importance of feedback. In defining the structure of the study and participant expectations, the researcher’s best estimate at time commitment was provided, and participants were asked to provide their self-assessment of meeting criteria, interest in the area, availability, and willingness to participate. A proposed schedule of rounds was also included to assist participants in realistically determining availability.

Participants were also encouraged to nominate others who they know to have similar credentials, which is one recruitment strategy for specialty topics or those with barriers to recruitment (Facione, 1990). This was particularly important for the handler group, as there is no particular way to easily identify handlers and recruiting solely through programs would have excluded owner trainers from recruitment.

**Data Collection**

**Round 1**

For Round 1, an open-ended questionnaire with 1-5 questions was preferred over more prescriptive approaches (Avella, 2016; Hasson et al., 2000; Mullen, 2003). The questionnaire (See Appendix C) was sent to participants via email with a request to return within 2 weeks. Sekayi and Kenney’s (2017) method of analysis was followed, with one addition. Using the
NVivo qualitative analysis software’s search and word cloud functions, I began from an inductive position to identify repeating ideas in the data through frequency query, as recommended by Fletcher and Marchildon (2014), in addition to open coding. Data was then coded into nodes related to each of the initial questions (Fletcher & Marchildon, 2014). A list of statements was then generated from these nodes, and the final questionnaire was sent out for Round 2 (See Appendix D).

Round 2

In Round 2, statements from generated from the Round 1 were provided to participants. Rather than endorsing items at this stage participants were asked to contribute further to the development of the statements by responding with narrative comments. Participants were asked to leave the statement as is if they had nothing to add or did not have experience with the statement, or to suggest modifications to statements that would make them applicable to their own experiences. This narrative data were then used to may either modify the statement to include elements of the comments and to better reflect the group opinion or to create a new statement if suggestions represent new ideas. More information and examples of this process are discussed in Chapter 4.

Round 3

Round 3 presents the revised list of statements for the panel to endorse. There is no standardization for scoring strategies. For the current study, a four or five category scale was proposed. It was more important that the scale was clearly defined to encourage uniform understanding across respondents than the exact scale used. Sekayi and Kennedy (2017) employ a four-category scale where “not endorsed” is defined as “has no experience with the subject of this statement or does not agree with the statement on any level”, “strongly endorsed” is defined
as “no modifications” and moderately and minimally endorsed are likewise clearly defined (p. 2761). It was important given the diversity of opinions being sought to make the categories of “no experience with the statement” and “do not agree with the statement” two separate categories. See Table 3-1 for endorsement categories.

Table 3-1

*Endorsement Categories*

<table>
<thead>
<tr>
<th>I have no experience with this statement</th>
<th>I disagree with this statement (no level of agreement)</th>
<th>I minimally agree with this statement (could agree with some moderate changes)</th>
<th>I moderately agree with this statement (small changes suggested)</th>
<th>I strongly agree with this statement (no changes suggested)</th>
</tr>
</thead>
</table>

**Round 4**

Round 4 consisted of analyzing and reporting back all results. There are many possible procedures to use for reporting. One method would be to only report strongly endorsed items (Sekayi & Kennedy, 2017). Consensus in this study was expected to be low due to the heterogeneous makeup of the panel and the lack of consensus as a goal of the study. Therefore lower endorsement levels were considered appropriate. Seventy percent to 75% is a common cutoff to determine an item’s endorsement (Avella, 2016; Hsu & Sandford, 2007; Sekayi & Kennedy, 2017). The strongly endorsed items meeting the 70% cutoff can therefore be reported first, followed by items that meet the cutoff when considering both moderate and strong endorsement. If items are clearly endorsed in one participant group but not others, that would be important in considering results and should be reported as well.

**Validity**

One of the main opportunities for researcher bias to enter into a Delphi is the first round, through either the questionnaire or analysis of the resulting data. The decision not to use a researcher generated questionnaire, but to distribute an open-ended questionnaire was made in an
effort to allow the panel to direct the data collection without initial bias. This has been used as a
criterion for well-conducted Delphi studies as a Round 1 questionnaire generated by literature
review can be problematic (Mullen, 2003). It was essential, in the current study, to have an
outside review of the initial question formulation to ensure that the questions are open-ended
enough to generate diversity of opinions and thoroughly capture the question, but do not steer the
response (Avella, 2016). The analysis of Round 1 was also considered in terms of validity. The
procedures were inductive, emergent, and focused on generating initial codes from the data,
rather than a priori coding from literature or theory, which may not have been as directly
applicable to the data generated or otherwise be biased.

A primary threat validity in a Delphi study is the subtle pressure toward convergence
(Hsu & Sandford, 2007). Ensuring that outside member checking at each Round is in place to
avoid leading in additions and feedback or inadvertent omission of opinions is an essential step.
It is also important for a norm that opinions that may be outliers will also be considered and
eventually reported, even if they are not the opinions eventually endorsed by the group (Sekayi
& Kennedy, 2017) and careful selection of statistical analysis techniques can ensure each
individual within the group is represented even if there is a significant difference in opinions
across the group (Hsu & Sandford, 2007). Although consensus was not a primary goal of this
study, it was important to be aware of the pressures the participants may experience.

A Priori Limitations

There is no evidence of the reliability of the Delphi method and so it is important to
recognize that when given to two or more panels with the same criteria and group makeups, the
same results may not be obtained (Hasson et al., 2000). Validity is primarily threatened by the
potential for pressure for convergence (Hasson et al., 2000). This may be mitigated by the use of
participants with knowledge and interest in the topic (Goodman, 1987). Response rate is also a major concern for validity within a Delphi study and steps should be taken to improve response rate and prevent dropout through careful participant selection and clear communication and preparation of participants regarding expectations, responsibilities, and time contribution (Hasson et al., 2000).

The role of the researcher as facilitator rather than contributor must be maintained in the study, and a limitation may occur where a researcher imposes preconceptions on respondents, particularly in a study design where Round 1 uses a literature review (Avella, 2016). This may also occur when poor summarization or omission of contributions occurs between future rounds. As with the potential pressure for convergence noted above, the qualities of participants should offset researcher shortcomings in this area (Avella, 2016). The possibility for using a qualitative approach would also offset these concerns by modifying the Delphi toward more narrative data in addition to a structured approach to synthesis Round 1 data while seeking a higher degree of participant feedback on this process than may ordinarily be requested in Round 2.

The lack of clear parameters regarding participant sample size or other universal guidelines has been considered a limitation of this methodology and can increase the risk of poor application of the methodology by researchers. The lack of random selection of the panel of experts has also been a criticism of the Delphi method, and one that is somewhat inherent to the design. It is also important therefore to consider the fact that a consensus, even of experts, may not be the “correct” answer and that results of this kind should be used to bring new issues for debate and to suggest new areas for research, with care taken not to over-value the outcomes.
CHAPTER 4: ANALYSIS AND RESULTS

The purpose of this study was to explore potential first steps toward the development of standards of care and related information for the SD industry and for service providers working with SD handlers to improve handler outcomes.

The primary research question was: What recommendations do experts on SDs have for consideration in the development of standards of care for SD handlers? The composition and experience of the panel and the data collection and analysis for each of the rounds of the Delphi study are discussed in this chapter.

Participant Recruitment and Demographics

Participant eligibility criteria included experience with SDs in the United States, and at least 5 years of experience in one or more of the defined groups: handlers, industry professionals in direct or indirect service roles, and mental health or rehabilitation professionals (See Appendix B for full criteria). Recruitment occurred over 8 weeks, with initial contact through my professional network both in the SD industry and handling spaces and with other counselor educators who might know of people with counseling training who use SDs. Several of these recommendations led to invitations to participate in the study. Emails were also sent to 2 standard organizations and 12 large service dog programs of varied client focus. In order to get mental health and rehabilitation providers several rehabilitation organizations including the state Office of Vocational Rehabilitation were contacted, but this did not result in any additional participants in this group.

The final number of participants was 14, which was slightly below the target number but above numbers estimated to be needed for accuracy, as addressed in Chapter 3. The participant groups did not end up being discrete in practice- most participants met the criteria of more than
one group, so the smaller number of participants was determined to be appropriate given the
amount and variety of experience represented by the panel as a whole. At the conclusion of
recruitment, the only targeted recruitment left was for mental health and rehabilitation
professionals, discussed further in Chapter 5.

The 14-member panel consisted of eight women and six men ages 28-69. The
participants had combined experience working with or training SDs in 8 US states and 2
additional countries, and experience across a total of 16 unique SD programs as well as in
owner training. The industry professionals reported a wide range of roles from board secretary
to trainers to general volunteers. The two participants in the mental health provider group, one
LPC and one CRC, were both also handlers and the screening instrument in Appendix A was
not used. Other notable experience reported by panel members included two participants who
completed PhD dissertations on SD topics, two participants with law degrees, and a secondary
handler for a minor. Table 4-1 and Table 4-2 below provide additional information about
participant groups and SD handling experience.

Table 4-1

<table>
<thead>
<tr>
<th>Participant Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participants</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Handlers (N = 9)</td>
</tr>
<tr>
<td>Industry Professionals (N = 7)</td>
</tr>
<tr>
<td>Rehab/Mental Health (N = 2)</td>
</tr>
</tbody>
</table>
Table 4-2

**Handler Demographics**

<table>
<thead>
<tr>
<th>Service Dog Handlers</th>
<th>Task Work Reported</th>
<th>Type of Training Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>(N = 9)</td>
<td>Guide (N = 3)</td>
<td>Program (N = 5)</td>
</tr>
<tr>
<td></td>
<td>Hearing (N = 2)</td>
<td>Owner Training (N = 1)</td>
</tr>
<tr>
<td></td>
<td>Medical Alert (N = 3)</td>
<td>Both (N = 3)</td>
</tr>
<tr>
<td></td>
<td>Mobility Support (N = 3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Psychiatric (N = 3)</td>
<td></td>
</tr>
</tbody>
</table>

**Data Collection**

The four round Delphi was distributed according to the schedule provided during recruitment (see Appendix A) over a 16-week period from August 15, 2021 to Dec 1, 2021. The first three rounds were collection rounds and were created, distributed, and gathered via Qualtrics. The final round was a reporting round for final member checking and was distributed via email. All 14 participants completed all three collection rounds. There was no major feedback provided in response to the Round 4 report to impact analysis or interpretation. Figure 4-1 shows the format, purpose, and analysis associated with each round.
While the purpose and general structure of rounds was set as addressed in Chapter 3 and Figure 4-1, the iterative nature of the Delphi methodology resulted in each round of participation influencing the content of remaining rounds of data collection.

**Round 1**

In Round 1 the panel responded to the following open-ended questions:

1. What do you think are vital issues for understanding service dog handler experiences?
2. What is key knowledge for healthcare/mental health providers working with handlers?
2. What do you believe should be considered to assess handler suitability when someone is considering a service dog? What qualities and factors are most important to determine eligibility as a handler?

3. In your opinion, what considerations are necessary for team formation/transfer training related to the handler’s abilities or development of the team dynamic?
   a. If possible, give examples of strategies you have used or seen that facilitate this transition to a working team.

4. What support do handlers need long term? What resources (economic, informational, material, etc.) may currently be lacking?

5. In your opinion, what either contributes to or prevents team success (or other good outcomes)? Consider such factors as handler traits, team chemistry, interpersonal dynamics and physical settings.

The questions were piloted with an expert not participating in the panel, and based on feedback small adjustments were made to wording from the initial draft of the questions. The Qualtrics survey was also checked for accessibility and piloted by a screen reader user not participating in the panel to better ensure full accessibility for all panel members.

Each participant responded in Qualtrics to varying degrees of detail. Using the qualitative analysis software NVivo, I looked at the overall responses and the responses for each individual question with word frequency and word clouds. I then coded the responses into general topics, which allowed me to move parts of responses that addressed other elements or referred back to other questions into those nodes. Fifty-six of these initial nodes (approximately half) had 2-5 participant references attached and could be summarized with one statement where participant perspectives were similar. For nodes with 6 or more participant references
attached multiple statements were needed. Less than one-third of nodes had only one participant reference. Most often this was due to an intentional decision to avoid coding parts of references into multiple nodes they might also relate to, as this increased the risk that something would not be captured or would be duplicated in the generation of statements. At other times, a participant’s unique perspective caused them to mention something not mentioned by other panelists. An example of this process for one node including three participant responses is presented in Table 4-3.

Table 4-3

Example of Round 1 Coding

<table>
<thead>
<tr>
<th>Narrative Responses</th>
<th>Node Label</th>
<th>Final Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>I do work a decent number of civilians with PTSD and the number one thing that I</td>
<td>Handler</td>
<td>A prospective handler must have a desire to improve their life and health, and</td>
</tr>
<tr>
<td>look for is that they are in a place where they WANT to improve their life. If I'm</td>
<td>Readiness</td>
<td>be ready to be responsive to the dog's cues.</td>
</tr>
<tr>
<td>trusting you with a dog that is trained to disrupt a depressive episode, are you</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ready to be responsive to that?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One reason that I am the first dog handler, in a 6 generation of blind Americans,</td>
<td>Handler</td>
<td></td>
</tr>
<tr>
<td>is that over decades, my family members have seen dogs mishandled … and otherwise</td>
<td>Readiness</td>
<td></td>
</tr>
<tr>
<td>&quot;wasted&quot; on individuals who should have never been matched. it left &quot;a bad taste&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>with my family.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>… desire to work on improving their own health…</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The process of summarizing the panel response to the open-ended questions generated 76 statements in the following 6 sections roughly aligned with the initial questions: *General Information, Information for Medical and Mental Health Providers, Handler Assessment, Team Formation, Important Resources,* and *Facilitators and Barriers to Positive Experiences and Outcomes.* The number of questions generated was higher than anticipated due to the
engagement of the panel members, and serious consideration was given to cutting down or combining items. However, upon review of the generated statements and in consultation with the individual piloting the surveys what stood out is how representative the generated statements were of the broader SD community in a way that has not been captured in research. During the piloting session the comment was made “we’ve been here for a while, but I’ve never seen us on the page like this when I look at research.” Given the belief of participant commitment and the goal of broadly uncovering elements for consideration in developing this field of research, the decision was made to proceed with all 76 statements and allow the opportunity for members to provide feedback rather than moving prematurely to consensus determination to meet policy related goals (Linstone & Turoff, 1975).

Round 2

Participants were asked to review the statements from the Round 1 analysis, which formed the Round 2 survey (see Appendix D for survey and full instructions). Participants were asked to indicate if a specific edit was required to make the statement align with their experience, or to provide additional responses/commentary.

Based on these responses, each statement was examined and assessed for whether changes were indicated. A statement might be edited based on participant feedback, or a new statement might be generated through participant reactions (for example a directly contrasting statement). An example of this process for a statement where two participants provided an addition is provided in Table 4-4. This process resulted in 140 statements that served as the endorsement-based items for Round 3. Additionally, based on two participants’ feedback around definitions and language, a question was added specifically to capture member definitions and acknowledge lack of standardized nomenclature across all SD related settings and organizations.
Several SD handler participants provided additional responses addressing their experiences with the public, access, and their SDs. One participant recounted, “I once went to dinner with some coworkers and was told we could not enter because of my dog. This was embarrassing and discourages coworkers from inviting me out for dinner again, which leads to issues at work.” Another recounted the emotional toll: “every time we get an access denial or are questioned about our rights to access, I get exceedingly nervous and jacked up, which only makes things harder on the dog - she can become distracted by my emotions and does not focus [on her job] as much as she should… [the] flustered appearance only makes the access issue worse because we look like we don't know what we are talking about. It's complicated.” Other handlers reported “actively avoiding” situations where access issues might occur because these issues are “time-consuming” and “draining”, with one participant saying that “not everything is worth the effort and time to educate or fight for access.” Based on these responses, a new category of Access Denials and Stigma emerged and several experience-based questions were added geared toward the members of the panel with handling experience.

To complete the survey development process, additional contributions to the facilitator and barrier lists provided in Round 2 were captured in summary and these lists were set up in Round 3 for rank order selection to determine importance of the items.
Table 4-4

Example of Round 2 Coding Process

| Round 2 Statement                                                                                                                                                                                                 | Feedback                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Round 3 Statements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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Round 3

Round 3 was primarily focused on endorsement of the 140 endorsement related items generated in the Round 2 analysis. The outline of the Round 3 structure is provided in Figure 4-2. For further information regarding subcategories and distribution of statements, see Appendix F. For a complete copy of all statements and instructions provided in Round 3, see Appendix E.

Figure 4-2

Round 3 Outline

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
</table>
| General Information                         | • Definition Question  
• 5 endorsement statements                        |
| Access Denials and Stigma                   | • 14 endorsement statements  
• 6 questions about handler experiences          |
| Information for Medical and Mental Health Providers | • 17 endorsement statements  
• 1 question about handler experiences            |
| Industry and Program Related Issues         | • 16 endorsement statements                                |
| Handler Assessment                          | • 35 endorsement statements across 5 sub-categories        |
| Important Resources                         | • 28 endorsement statements across 4 sub-categories        |
| Team Formation                              | • 25 endorsement statements across 4 sub-categories        |
| Facilitators and Barriers to Positive Experiences and Outcomes | • Rank order of 18 facilitators  
• Rank order of 14 barriers                      |
The analysis of the Round 3 responses focused primarily on identifying items that met specific thresholds of strong and moderate agreement. Strong agreement included only the top endorsement category “I strongly agree with this statement (no changes suggested)” and moderate agreement included this category as well as the second endorsement category “I moderately agree with this statement (small changes suggested).” For all endorsement categories see Table 3-1 on page 59.

To allow for the varied background of participants, a separate analysis was done omitting the “I have no experience with this statement” response level. This measure of the endorsement level of an item taking into account only those who marked an agreement level and excluding those who indicated they had no experience with the statement is differentiated as “adjusted for experience” [See Appendix G for all thresholds reported]. This is not to be confused with the experience-based questions asked of handlers in the Access and Stigma category, as these questions focused on frequency of experience rather than endorsement and are not included in the 140 endorsement items being reported. Any endorsement items not endorsed with experience by at least half of the panel would have been considered for omission, but all endorsement items met this threshold so no items were omitted.

The items endorsed at high agreement thresholds are discussed further in the Results section in tables 4-3 and 4-4. The full table of all items and their respective endorsement levels is provided in Appendix G.

Round 4

Round 4 consisted of a preliminary report of findings distributed to the participants including the summary of panel experience, a summary of the rounds, and statements endorsed with strong agreement at 100%, 90%, and 80% plus additional statements endorsed with
moderate agreement at 100% not already included in the strong agreement reports. The report also included the responses regarding definitions, handler experience-related item responses, and the rank ordered lists of facilitators and barriers. Initial questions for further analysis were also provided to the panel in the Round 4 report (see Appendix F). These results are discussed further in the Results section and Chapter 5.

**Evidence of Trustworthiness**

This study used member checking throughout the Delphi rounds to establish credibility and trustworthiness. Data were validated through member checking in Round 2 with more extensive ability to comment on each individual statement, and in Round 3 with the encouragement to provide any overall or specific feedback on the round. The inclusion of Round 4 as a reporting round provided an additional opportunity for panel members to provide feedback or corrections, and while some general responses were received from members regarding Round 4, no formative feedback was provided that would indicate lack of agreement from participants regarding the results or presentation of the data.

Transferability was of concern and addressed by peer review. Members of the dissertation committee served as reviewers, as well as the individual who piloted Rounds 1 and 2. The keeping of memos (memoing) that document procedure, researcher reactions, and thoughts and reactions to the data is common in qualitative research. Extensive memoing was also conducted throughout the analysis process, in particular during the analysis for Round 1 which had the highest risk of transferability due to the relatively lower degree of member input on some items. Memoing was also conducted throughout Round 2 to address changes made to statements and sections added.
This process of memoing also supported the completion of an audit. A preliminary audit addressed the Round 1 analysis, due to the importance of this analysis in informing the rest of the study. Following completion of the four rounds of data collection and analysis, all aspects of the study were evaluated by an outside auditor proficient in qualitative methodology, providing external trustworthiness of the analysis.

**Results**

**Research Question**

The results relating to the primary research question (What recommendations do experts on SDs have for consideration in the development of standards of care for SD handlers?) were communicated primarily by the endorsement items that reached high levels of consensus. Although this study was conducted with a policy focus and a goal of generating as many perspectives and ideas as possible, a large number of statements in the Round 3 survey naturally generated high consensus.

Tables 4-3 and 4-4 provide the most endorsed items, at strong and moderate levels of agreement with adjustment for no experience with the items. The full table with endorsement thresholds set at 100%, 90%, and 80% at strong and moderate agreement with and without adjustment is included in Appendix G.
### Table 4-5

*Statements Endorsed by 100% of the Panel at Strong Agreement, Adjusted for Experience*

<table>
<thead>
<tr>
<th>Category</th>
<th>Statements Endorsed (N = 9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>For Medical/Mental Health and Other Providers</td>
<td>Providers need to understand the role of service dogs and that psychiatric service dogs are not emotional support animals. Providers need to speak to handlers respectfully and treat them as individuals who will have their own boundaries regarding interactions with their service dog. Providers need to understand that interacting with/distracting a service dog without the handler's permission is rude and can be harmful to the handler and the dog.</td>
</tr>
<tr>
<td>Handler Assessment: Readiness/Commitment</td>
<td>A potential handler must be ready to commit to put in the time and effort it takes to make a service dog partnership work, including ongoing training and troubleshooting in addition to the care and attention the dog will require.</td>
</tr>
<tr>
<td>Handler Assessment: Handler Expectations</td>
<td>Potential handlers need to be prepared for the amount of work a service dog requires and how different it is from having a pet. Potential handlers need to be prepared for the reality that a service dog may increase the visibility of their disability or change their disability presentation socially.</td>
</tr>
<tr>
<td>Important Resources: Legal and Policy Resources</td>
<td>Handlers need access to information on disability rights and advocacy services.</td>
</tr>
<tr>
<td>Team Formation: Building Relationship</td>
<td>It is important that the team develops trust in each other and communicates well. Building a team bond is an active and ongoing process.</td>
</tr>
</tbody>
</table>
### Table 4-6

*Statements Endorsed by 100% of the Panel at Moderate Agreement, Adjusted for Experience*

<table>
<thead>
<tr>
<th>Category</th>
<th>Statements Endorsed (N = 65)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Information</strong></td>
<td>Handlers of owner trained dogs and program/organization trained dogs will have some different experiences and needs, particularly during the training phase.</td>
</tr>
<tr>
<td></td>
<td>Getting a service dog is a major adjustment and comes with many responsibilities (care, training, maintenance) beyond having a pet, which handlers may not be prepared for.</td>
</tr>
<tr>
<td></td>
<td>The bond between a handler and service dog is a symbiotic partnership. The dog is an extension of the handler reducing disability related barriers, and the handler provides stability for the dog.</td>
</tr>
<tr>
<td><strong>Access Denials and Stigma</strong></td>
<td>Lack of education about service dogs in the general public can lead to access denials and judgmental comments.</td>
</tr>
<tr>
<td></td>
<td>Cultural biases may also contribute to access denials.</td>
</tr>
<tr>
<td></td>
<td>Certain types of handlers experience disproportionate bias due to their disability- for example psychiatric service dog handlers.</td>
</tr>
<tr>
<td></td>
<td>Many people do not understand that service dogs are not pets but are working dogs essential to their handlers living independent lives.</td>
</tr>
<tr>
<td></td>
<td>The attention handlers experience in public is positive or can be seen as positive if the handler has reasonable expectations for public interactions</td>
</tr>
<tr>
<td></td>
<td>When family/friends are not supportive or exclude the handler due to their service dog it can cause rifts in the family and leave the handler isolated.</td>
</tr>
<tr>
<td><strong>For Medical/Mental Health and Other Providers</strong></td>
<td>Providers need to understand the role of service dogs and that psychiatric service dogs are not emotional support animals.</td>
</tr>
<tr>
<td></td>
<td>Providers need to speak to handlers respectfully and treat them as individuals who will have their own boundaries regarding interactions with their service dog.</td>
</tr>
<tr>
<td></td>
<td>Providers need to understand that interacting with/distracting a service dog without the handler's permission is rude and can be harmful to the handler and the dog.</td>
</tr>
<tr>
<td></td>
<td>Providers should seek education on how service dogs improve handler's quality of life and independence.</td>
</tr>
<tr>
<td></td>
<td>It is particularly important that providers be knowledgeable about service dogs prior to recommending a service dog for a patient, as is typical with other treatment/medication options.</td>
</tr>
<tr>
<td></td>
<td>Providers need to understand and have training in trauma and disability issues, as well as an understanding of the impact of invisible disabilities.</td>
</tr>
</tbody>
</table>
Providers should understand the diverse and varied experiences and needs of people with disabilities and that service dogs are not all alike.

Providers must have knowledge of service dog etiquette. They should not pet, talk to or distract the dog, ask intrusive questions, or question the necessity/legitimacy of the dog (this assumes the provider is not actively involved in the placement process, for example if in an urgent care setting or other unrelated care).

More extensive education and availability of training is required for medical and mental health providers in order to satisfy the above recommendations.

<table>
<thead>
<tr>
<th>Industry/ Program Related Issues</th>
<th>There are certain groups (such as those with multiple co-occurring conditions, dual-sensory impairments, and those with mental health concerns) who are currently under-served by the service dog industry.</th>
</tr>
</thead>
</table>

### Handler Assessment: General Handler Assessment

Assessing a person for suitability as a handler is essential for ultimate team success but is challenging and relies on many variables.

Love of dogs and the ability to connect with dogs is important, but is not enough to indicate a potential handler will be successful.

The likelihood the dog will be used by the potential client should be strongly considered.

### Handler Assessment: Dog Welfare and Care

Potential handlers should have the ability to independently care for a dog. If 100% independent care is not anticipated, there must be a plan for how they will get assistance caring for the dog at these times (family or an available support system, for example).

Programs assessing financial stability as part of determining whether to accept a potential handler as a client must take into account the financial barriers related to disability.

A program requesting proof of assets or having a set income requirement well beyond general food, care, and regular vetting requirements is not an appropriate practice.

Providing the dog with enough physical and mental stimulation along with sufficient downtime to relax and be off duty is important.

### Handler Assessment: Basic Handler Screening

A home visit and interviews with family members, close friends, or treatment team members in advance of acceptance into a program is advisable. This allows for more accurate knowledge and a chance to provide feedback to potential handlers who may not be ready to be matched with a service dog, but could improve their suitability through counseling, training, or other growth opportunities.

A medical or mental health professional’s recommendation, assessment, or collaboration with the organization may be helpful in some situations.
Individuals who have had time to adjust to their diagnosis and attempt other treatment are more likely to be aware of symptom presentation and needs a service dog could support, and have had an opportunity to demonstrate consistency/follow-through in their adjunctive care.

Although not as commonly discussed, other disabilities may have their own specific prerequisites prior to placement with a service dog (for example, blood glucose management in diabetes or appropriate physical therapy for mobility concerns).

It is important for a program/trainer to consider early on if a potential handler/client is capable physically, mentally, and emotionally of meeting the expectations of the training program, if accommodations can be made (such as individual instead of group training or additional contact hours), or if the client will not be able to be successful in the training approach the program/trainer can offer.

<p>| Handler Assessment: Readiness/Commitment | A potential handler must be ready to commit to put in the time and effort it takes to make a service dog partnership work, including ongoing training and troubleshooting in addition to the care and attention the dog will require. |
| Handler Assessment: Handler Expectations | Potential handlers need to be prepared for the amount of work a service dog requires and how different it is from having a pet. |
| | Potential handlers need to be prepared for the reality that a service dog may increase the visibility of their disability or change their disability presentation socially. |
| | Potential handlers need to be fully prepared for the challenges they may encounter as a handler such as access issues, unwanted attention, people staring and approaching. |
| | Potential handlers need to be prepared for setbacks and that both they and the dog will make mistakes. Being prepared to work through challenges with a return to foundational training is important. |
| Important Resources: Legal and Policy Resources | Handlers need access to information on disability rights and advocacy services. |
| | Current information on access laws and legal changes is important for handlers and should be provided through programs/trainers where applicable. |
| Important Resources: Program and Trainer Support | Over the duration of a dog's working life, a handler's needs may change, requiring the training of new skills/tasks for the dog. A handler's needs changing may also result in early retirement of a service dog. Continued support from trainers/programs over the working life of the dog is important. While the amount of support needed by teams will vary, handlers need to be able to ask questions when concerns come up and have access to training support in person, via video, etc. A trainer/program in continued contact with a team may also notice warning signs of task training not being maintained or problematic behaviors developing that the handler is not yet aware of and be able to provide early intervention. Peer mentor programs are also valuable especially for new handlers |
| Important Resources: Social Support | Support of local family or friends is important and can be necessary to provide care of the service dog in emergencies. Non-traditional emergency plans involving neighbors, co-workers or others are suitable in the event of lack of family support. |
| Important Resources: Financial Support | Support for required travel (such as for annual public access testing) is the handler's responsibility but should be something the handler is permitted to fundraise. For example, an organization should not disallow fundraising for travel costs in their contract. |
| Team Formation: Initial Matching | The dog's performance of general obedience with multiple trainers in a public/high distraction setting, appropriate temperament, and ability to perform the tasks required by the handler (including working around relevant assistive equipment) is a basic requirement prior to team matching/formation. Signs of initial fit of dog and handler (dog not stressed by handler, general personality match) are important for later team bond and should be assessed with the dog and handler interacting before selection is finalized. Matching should be done carefully with the input of more than one person. Programs tend to know the history and temperament of the dog, but need to take more care in getting to know the personality and specific needs of the handler. A good match takes into account many factors, including the dog's personality, strengths, weaknesses, temperament, training, activity level, and natural talents paired with the potential handler's strengths, weaknesses, task needs, activity level, lifestyle, home and work environments, support network (including family), and personality. |</p>
<table>
<thead>
<tr>
<th>Team Formation: Building Relationship</th>
<th>It is important that the team develops trust in each other and communicates well.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Building a team bond is an active and ongoing process.</td>
</tr>
<tr>
<td></td>
<td>Early in the team's relationship, the dog and handler should get to know each other through games and playing and low stress activities.</td>
</tr>
<tr>
<td></td>
<td>It is most important for the handler to have trust in the dog.</td>
</tr>
<tr>
<td></td>
<td>It is important that the handler is the sole caretaker of the dog (in the first months following official placement or ongoing) and that all food, care, and the majority of interaction comes from the handler.</td>
</tr>
<tr>
<td>Team Formation: Confidence</td>
<td>As the team becomes accustomed to each other, known tasks in familiar environments can build confidence.</td>
</tr>
<tr>
<td></td>
<td>As much as possible, a program or trainer should practice similar outings to the handler's week to week life or expose the team to the actual daily environments they will encounter with trainer support.</td>
</tr>
<tr>
<td></td>
<td>The handler must learn how to cue or lead tasks confidently and have a degree of comfort working in public places for successful transfer of the dog to the handler/client.</td>
</tr>
<tr>
<td>Team Formation: Pace/ Structure of Transfer Training</td>
<td>Initial training on topics like dog behavior, dog body language, and basic cues could be taught even before being matched with a dog, to allow for more focus on team bond and application after team selection and less cognitive load on handlers/clients trying to take in a lot of new information.</td>
</tr>
<tr>
<td></td>
<td>It may be important due to disability concerns for programs not to have a one-size approach to transfer training: for example, an intensive over many days may not be physically or emotionally possible, and the repetition needed to build skill and confidence may take months or years of smaller doses of training, especially for new handlers.</td>
</tr>
<tr>
<td></td>
<td>Some type of one-on-one training element is important to catch failing/struggling team matches and provide the individual support necessary for confident teams.</td>
</tr>
<tr>
<td></td>
<td>It is important to identify teams that may need additional support and provide a clear process/dedicated contact for teams to get additional support, particularly for the first year with new handlers.</td>
</tr>
</tbody>
</table>

**Other Notable Results**

The iterative process of the Delphi also meant that some additional areas of inquiry arose based on participant engagement. The three main areas of additional results not directly linked to
the research question include the definitions used by the panel members, the answers to the experience-based items for handlers, and the rank ordered facilitators and barriers. These results are presented in the tables below and in the Round 4 Report (See Appendix F).

**Definitions**

For the purposes of this study, *service dog* has been used as a universal term for all types of assistance animals including guide, hearing, mobility, medical and psychiatric response dogs. This is due to the lack of common definition across settings/organizations/countries and some current challenges with the term *assistance animal* being used for ESAs in higher education policy leading to potential confusion. However, because language is a challenge both within the community and in current research, panel members were asked to note the definition(s) they use.

Table 4-7

**Definitions Used by Panel Members**

<table>
<thead>
<tr>
<th>Definition Used (Multiple Selections Permitted)</th>
<th>Participants Endorsing this Definition</th>
<th>Participants Endorsing Only this Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 'service dog' is any dog used for the purposes of disability support (i.e. 'service animal' in the ADA definition)</td>
<td>(N = 10)</td>
<td>(N = 6)</td>
</tr>
<tr>
<td>I use this definition, but I use 'assistance animal or assistance dog'</td>
<td>(N = 5)</td>
<td>(N = 2)</td>
</tr>
<tr>
<td>A service dog provides medical or psychiatric task work, while an assistance dog provides guide or hearing task work</td>
<td>(N = 0)</td>
<td>(N = 0)</td>
</tr>
<tr>
<td>A service dog provides any non-guide related task work, but I use the terms guide dog and service dog to define this difference</td>
<td>(N = 3)</td>
<td>(N = 1)</td>
</tr>
<tr>
<td>A service dog is what I call a dog meeting the definition in the ADA, but assistance dog includes a broader group of dogs such as therapy/facility dogs and possibly ESAs</td>
<td>(N = 1)</td>
<td>(N = 0)</td>
</tr>
<tr>
<td>An assistance dog is what I call dogs meeting the definition in the ADA, and service dogs are military or K9 units</td>
<td>(N = 0)</td>
<td>(N = 0)</td>
</tr>
<tr>
<td>I use some other definition or would like to add another definition I am aware of but do not use</td>
<td>(N = 2)</td>
<td>(N = 1)</td>
</tr>
</tbody>
</table>
In response to the small number of Round 2 items related to access issues, panel members with handling experience provided long responses that detailed other related concerns. The volume of responses from participants that addressed access issues and stigma either in isolation or as a secondary topic in another response indicated the addition of statements and making access issues a sub-category. The following questions were also added to address the experience with and frequency of specific concerns reported by handlers.

Table 4-8

*Handler Responses to Access Issue Questions*

<table>
<thead>
<tr>
<th>Handler (N = 9) responses to Access Issue category experience-based questions</th>
<th>Almost Always</th>
<th>Often Sometimes</th>
<th>Almost Never</th>
<th>No Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have experienced access challenges or negative interactions when working with my service dog in public.</td>
<td>0</td>
<td>2</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>I have experienced people interfering with or petting my service dog without permission.</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>I have experienced other harassment such as being photographed in public without my permission.</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Due to access challenges, I have personally experienced negative consequences such as not being invited out by friends following an incident.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Due to access challenges or the anxiety of having an access challenge, I sometimes &quot;pick my battles&quot; and avoid settings I have the legal right to enter.</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>I have personally had negative interactions with mental health or medical providers due to lack of knowledge or breach of service dog etiquette.</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>
Facilitators and Barriers

The initial open-ended question in the Round 1 survey relating to Facilitators and Barriers for team success allowed for the panel to generate a number of considerations in these areas. Rather than seeking only endorsement, this section was set up to have participants rank order the statements by their importance. Twelve of the panel members completed this section appropriately, with two inaccurate completions that were unusable and therefore removed. The rank order options for screen reader accessibility in Qualtrics are limited and represent a lower tolerance for error in completion than the inaccessible forms (such as a visual drag and drop).

Findings from the completed rank order sections are presented in Table 4-9.

In tables 4-9 and 4-10, items ranked “1” by participants indicated their first choice, while those ranked either “18” or “14” respectively indicated their last choice. The items are presented in order of the mean, but the mode and range are also provided. The range is particularly helpful as it indicates whether an item was given very different rankings by some panel members. For example, “Inability to advocate for self and team” received a mean and mode of 10 but had a range from 2 to 14, meaning that at least one member ranked this item as their second choice. By contrast, “poor team communication” had a mean of 4.17, a mode of 5, and a range of only 2-6 meaning all participants included this item as number 2, 3, 4, 5 or 6 in their rank order assignments.
### Table 4-9

**Rank Ordered Facilitators for Positive Outcomes**

<table>
<thead>
<tr>
<th>Facilitators</th>
<th>Mean</th>
<th>Mode</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Facilitators That Improve Chances of a Good Overall Outcome/Experience:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A handler who wants help and is ready for the responsibility</td>
<td>4.50</td>
<td>1</td>
<td>1-11</td>
</tr>
<tr>
<td>Commitment to the process and the relationship from the handler</td>
<td>4.75</td>
<td>3</td>
<td>1-14</td>
</tr>
<tr>
<td>A good basic match of needs/personalities and chemistry between the handler and the dog</td>
<td>5.92</td>
<td>1</td>
<td>1-16</td>
</tr>
<tr>
<td>Education upfront on what the service dog can do for the individual and reasonable expectations</td>
<td>6.58</td>
<td>9</td>
<td>1-16</td>
</tr>
<tr>
<td>Trust between team members and a supportive team bond</td>
<td>6.75</td>
<td>6</td>
<td>2-13</td>
</tr>
<tr>
<td>The skill and experience of the trainer/organization with the type of work needed</td>
<td>7.00</td>
<td>9</td>
<td>1-13</td>
</tr>
<tr>
<td>Handlers that are willing to learn and receive constructive feedback</td>
<td>7.17</td>
<td>4</td>
<td>2-16</td>
</tr>
<tr>
<td>A willingness to put the dog and the team’s needs first</td>
<td>7.92</td>
<td>11</td>
<td>2-17</td>
</tr>
<tr>
<td>A good match between handler and program or trainer for the training process and program requirements</td>
<td>9.33</td>
<td>6</td>
<td>2-14</td>
</tr>
<tr>
<td>Supportive follow-up communication and contact with the organization or trainer</td>
<td>9.58</td>
<td>8</td>
<td>2-17</td>
</tr>
<tr>
<td>A thorough and accurate assessment of potential handler success based on medical/mental health provider documentation</td>
<td>10.08</td>
<td>3</td>
<td>3-18</td>
</tr>
<tr>
<td>Ongoing primary treatment where applicable (mental health counseling, medical support, etc.)</td>
<td>10.67</td>
<td>15</td>
<td>3-16</td>
</tr>
<tr>
<td>An understanding of the costs related to the dog/training and any follow up</td>
<td>11.67</td>
<td>11</td>
<td>1-18</td>
</tr>
<tr>
<td>A support structure local to the handler</td>
<td>12.17</td>
<td>14</td>
<td>5-17</td>
</tr>
<tr>
<td>Program/trainer transparency around policies and requirements and clear expectations for investment (financial and time)</td>
<td>12.25</td>
<td>15</td>
<td>7-18</td>
</tr>
<tr>
<td>Financial stability</td>
<td>13.00</td>
<td>13</td>
<td>7-18</td>
</tr>
<tr>
<td>Education in legal rights of teams and businesses plus legal options to navigate access denials</td>
<td>14.75</td>
<td>18</td>
<td>10-18</td>
</tr>
<tr>
<td>Annual assessment (such as a Public Access Test)</td>
<td>16.92</td>
<td>18</td>
<td>14-18</td>
</tr>
</tbody>
</table>
Table 4-10

*Rank Ordered Barriers to Positive Outcomes*

<table>
<thead>
<tr>
<th>Barriers That Reduce Chances of a Good Overall Outcome/Experience:</th>
<th>Mean</th>
<th>Mode</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor dog temperament or health</td>
<td>3.25</td>
<td>1</td>
<td>1-12</td>
</tr>
<tr>
<td>Unreasonable expectations of dog behavior (the dog must be perfect)</td>
<td>3.67</td>
<td>2</td>
<td>1-7</td>
</tr>
<tr>
<td>Poor team communication (not giving the dog breaks, not having good positive feedback)</td>
<td>4.17</td>
<td>5</td>
<td>2-6</td>
</tr>
<tr>
<td>A program/trainer that is not a good fit or is not operating ethically</td>
<td>5.75</td>
<td>1</td>
<td>1-13</td>
</tr>
<tr>
<td>Not using the service dog or not maintaining training</td>
<td>5.67</td>
<td>7</td>
<td>1-10</td>
</tr>
<tr>
<td>Lack of appropriate level of care (not meeting mental stimulation needs, not addressing health concerns, working an overweight or injured dog)</td>
<td>5.83</td>
<td>3</td>
<td>2-11</td>
</tr>
<tr>
<td>Unexpected changes such as those to a handler's personal life, loss of support people, or changes in financial stability</td>
<td>6.92</td>
<td>9</td>
<td>2-14</td>
</tr>
<tr>
<td>Fixating on mistakes</td>
<td>7.92</td>
<td>7</td>
<td>3-11</td>
</tr>
<tr>
<td>Significant trauma to the team, for example a dog attack</td>
<td>9.00</td>
<td>11</td>
<td>2-14</td>
</tr>
<tr>
<td>Others interfering with the team (strangers or family/supports)</td>
<td>9.67</td>
<td>13</td>
<td>4-13</td>
</tr>
<tr>
<td>Inability to advocate for self and team</td>
<td>10.00</td>
<td>10</td>
<td>2-14</td>
</tr>
<tr>
<td>Lack of education regarding service dogs in the general public</td>
<td>10.00</td>
<td>14</td>
<td>4-14</td>
</tr>
<tr>
<td>Lack of lifetime support from the trainer/organization, including emergency support (for program handlers)</td>
<td>10.67</td>
<td>13</td>
<td>4-14</td>
</tr>
<tr>
<td>Need for substantial retraining or &quot;career change&quot; for the dog, for example due to changing disability related needs</td>
<td>11.58</td>
<td>12</td>
<td>8-14</td>
</tr>
</tbody>
</table>
CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

The purpose of this policy Delphi was to explore considerations and knowledge expert stakeholders (SD handlers, SD professionals, and rehabilitation/mental health providers) deem important in the development of standards of care for SD handlers and in improving the understanding of SD handlers. The research focused on identifying areas where clear recommendations and knowledge exist, as well as areas in which there may need to be further inquiry. Given the iterative nature of the Delphi and intentionally broad scope of the study, several other areas of interest generated by the panel emerged.

Interpretation of the Findings

At the time of this study, there has been very little research that is grounded in the SD community in ways that are representative. The research available indicates the need for provider education (Lamontagne et al., 2020; Modlin, 2000; Winkle et al., 2012) and placement assessment and follow-up (Butterly et al., 2013) to understand the experiences of SD handlers (Mills, 2017; Sanders, 2000). The complexity of factors within a team is well established (Asher et al., 2013; Duffy & Serpell, 2012; Murphy, 1995; Serpell & Hsu, 2001; Tomkins et al., 2011), but there is not a standard for successful team pairing (Lloyd et al., 2016). The transition into their new role poses challenges for SD handlers (Gravrok et al., 2019) and outcomes may be varied and impacted by the level of preparation of the handler (Stumbo & Yarborough, 2019; Yarborough et al., 2018). These challenges and complexities indicate a need for better understanding of resources and support handlers need, as well as documentation of the knowledge within the SD industry and SD handler communities. This study is a step toward research that is representative of the SD community by actively engaging handlers and industry professionals and allowing their priorities and feedback to shape the direction of the research.
The study began with questions based on the model of treatment phases (see Figure 2-4 on page 42), and categories and topics were added throughout the four rounds based on panel feedback. This formed the basis for a framework which, at this point, had not been articulated in the literature. The model outlined components that included assessment considerations, outcome contributors, resources needed, and training gaps for providers. There are also opportunities for further research in areas that were not the focus of the panel in this study, but are included in the treatment phase model or were mentioned by members of the panel in narrative responses, which will be discussed. These would include areas of study that more directly address the biopsychosocial model introduced in Chapter 2, which fits much of what is currently emerging in the literature surrounding SD outcomes but does not account for the more process-focused findings of this study.

Using a series of items developed and then subsequently endorsed by the expert panel, findings will be discussed as it relates to implications for rehabilitation research, policy, and education, as well as insights gained from completing this study particularly as it applies to the recruitment process and the use of Delphi.

**Findings Related to Research**

Further research is needed, including grounded theory to develop an appropriate framework by which to conceptualize SD interventions and outcomes and phenomenological or other qualitative work to examine the complex relationship of factors involved in the process of determining handler appropriateness and matching a SD to a handler. Given what was learned from this study, some initial considerations might include: (a) the appropriateness of a SD based on disability related needs and handler readiness, (b) handler-program fit and SD-handler fit, (c)
handler environment and available support, and (d) other disability and treatment factors that might positively or negatively influence SD intervention outcomes.

Given the variety of disability related task work SDs may be used for and the varied needs of handlers, additional research is also needed to identify any common factors for SD outcomes and those considerations that may be specific to certain disabilities or work and tasks. Further narrative research (as noted in Rounds 1 and 2) and additional panel or focus groups are needed to better understand documented experiences of handlers and industry professionals, document current practices, and contribute to the development of empirically based industry standards. Once identified, efforts to evaluate effectiveness programs using these standards can be undertaken.

Items identified in this study provided an initial framework particularly those tasks associated with medical and mental health provider knowledge, as well as items that address general knowledge of SDs. Eventually, training programs could be developed and evaluated in terms of their effectiveness as far as how changes in pre- and post-test scores have changed. This study’s findings indicated a reasonable basis for such a training program would include (a) basic disability information, (b) etiquette guidance related to disabilities and to SD use, (c) knowledge about what SDs can do for their handlers, (d) when a recommendation of a SD is appropriate for a client/patient, and (e) information about SD handler experiences.

In the long term, large scale quantitative data from industry stakeholders and handlers as well as field research to develop and refine assessment tools and interventions will be essential in order to form the basis for policy recommendations. For medical and mental health providers, this research could culminate in a certification and set of standard recommendations for best practice in treatment and assessment. For industry, additions to ADI standards or the operating
procedures of large, respected organizations related to assessment of potential handlers and measuring of outcomes are needed. In broader policy, there are potential implications for state and federal laws and for improved and updated legal briefs to address improved implementation of existing laws.

**Findings Related to Industry and Policy**

In terms of industry and policy implications, one aspect from this study concerns the relative agreement among panel members across the five subcategories. Specifically, of 31 statements across these categories, the panel endorsed 24 statements resulting in a threshold of 80% moderate agreement adjusted for experience or higher. Additionally, every statement in the subcategories *Handler Readiness/Commitment* and *Handler Expectations* was endorsed at least a 90% moderate agreement level when adjusted for experience and participants noted in the narrative responses in Round 2 how important these two areas were for team success. It is important to note that readiness and expectations are rarely directly assessed for or addressed by SD programs. This sub-set of statements represents the basis for an assessment measure that could be further developed to be valuable both to SD programs and mental health, rehabilitation, or medical providers who are asked to consult on SD placements.

The lists of facilitators and barriers stand on their own as findings from this research and may inform assessment development, the construction of outcome measures, or other research efforts. One surprising finding from the facilitators and barriers stands out, however in that the item ranked last was *annual assessment (such as a Public Access Test)*. This is a requirement of ADI programs and seen as a way to ensure SD teams are operating at appropriate standards, so the fact that this was very low on the list suggested perhaps there is a disconnect between policy and practice or handler needs. For example, *education upfront on what the service dog can do for*
the individual and reasonable expectations was ranked fourth in the facilitators list, but more than one participant reported that not enough education takes place, or the timing is poor to improve handler success.

Other areas related to policy and industry recommendations require further analysis for appropriately nuanced findings and recommendations. For example, the group of statements related to SD certification or identification cards, which is a frequent conversation in the SD community is one that remains divisive. The statements *a nationally recognized certification or ID process would decrease stress on service dog teams* was endorsed at an 80% moderate threshold adjusted for agreement, as was *a Public Access Test would be a good starting requirement for such a nationally recognized certification/ID process*. However, the statements *such a certification would result in a reduction of fake service dogs and such a certification would help eliminate access challenges* were not endorsed at this threshold, while *there could be serious issues with the fair and equitable implementation of any standardized identification program* was endorsed. These results demonstrate the complexity of the policy issues regarding SDs and the need for representation of handlers in these decisions. While the groups of handlers (N = 9) and non-handlers (N=5) were small, on average non-handlers in the panel were more likely to agree strongly or moderately with the need for certification, the value of a PAT in relation to certification, and the potential benefits of certification. Handlers were more likely to endorse the potential for challenges in equitable implementation of such a standard. The two participants who were strongly opposed to certification or the potential benefits of certification (both handlers) also both strongly endorsed the statement *focusing on education for the general public is more likely to eliminate challenges handlers face than attempting to implement a certification/ID program.*
Findings Related to Rehabilitation and Counselor Education

Recommendations for medical and mental health providers were an area of strong consensus for the panel. There were only three statements in this category not endorsed by the panel with at least a 90% moderate agreement threshold when adjusted for experience. Two of these items were essentially reverse coded items: providers should trust the judgement of a trainer/program/organization and not conduct an evaluation and, providers should trust the judgement of a patient/potential handler and not conduct an evaluation. The third statement, the exact role a provider should play in evaluation and how much control they should have is complicated fell just below the endorsement threshold. Two statements in this category met the 100% strong endorsement threshold with no adjustment for experience: providers need to speak to handlers respectfully and treat them as individuals who will have their own boundaries regarding interactions with their service dog, and providers need to understand that interacting with/distracting a service dog without the handler's permission is rude and can be harmful to the handler and the dog. These are both key etiquette concerns that participants noted in the initial rounds of collection. The statement more extensive education and availability of training is required for medical and mental health providers in order to satisfy the above recommendations was also endorsed by the panel with 80% strong agreement not adjusted for experience, and at 100% moderate agreement not adjusted for experience. This and the participant feedback further discussed in the process related findings section indicate a serious need for additional education for service providers who work with SD handlers.

The narrative data from this section drove home the importance of providers being trained, as well as frustration (particularly from handlers) at the experiences they have had with seeking treatment from untrained providers. The responses to unwanted interaction being
potentially harmful and the need for providers to be aware of etiquette stood out. One participant responded that “professional organizations, and credentialing organizations, should make this part of their continuing education, for all professions. Sixth graders are getting more training on this, than professionals with masters degrees and doctorates.” Another agreed, continuing, “Hands off! Also, it makes handlers upset when the provider they are paying $20/minute to see is ignoring them to play with a dog.” Other participants noted that this behavior is “rude” and “unprofessional”, but that provider’s “failure to do so often results in a hands-on lesson in this very thing” through negative impacts and the need for handlers to self-advocate.

Additional participant responses reinforced that this lack of basic etiquette and respect from medical and mental health providers is indicative of a general lack of understanding about what SDs are and the function they serve for their handlers. The demographics, lived experiences, needs and priorities of SD handlers should be the basis of education for professionals who may serve SD handlers. However, there are also specific implications for rehabilitation and mental health counselors in training. SDs as part of a treatment plan may be viewed as assistive technology (AT), and part of the practice of rehabilitation counselors is to have an understanding of AT as well as knowledge of appropriate assessments for treatment planning and AT needs. As the empirically based approaches in this area grow, it will be important for SD information to be included in discussions of AT and assessment to meet Council for Accreditation of Counseling and Related Educational Programs (CACREP) standards such as 5.D.2.q assistive technology to reduce or eliminate barriers and functional limitations, 5.D.3.a diagnostic interviews, mental status examinations, symptom inventories, psychoeducational and personality assessments, biopsychosocial histories, assessments for treatment planning, and assessments for assistive technology needs, and 5.C.1.e psychological
tests and assessments specific to clinical mental health counseling (CACREP, 2015). There are also a number of ethical obligations under the ACA Code of Ethics relevant to this topic, including C.2.a Boundaries of Competence related to practice, and E.2.a Limits of Competence related to assessment (American Counseling Association, 2014). Despite the strong potential to serve in recommending roles related to a client being paired with a SD, there is a lack of knowledge among counselor educators. This results in a lack of knowledge for counselors and results in a situation where services may not be available to clients who need them due to scope of practice concerns and lack of information or training. This means that there is an impactful intervention point for increasing the knowledge base of counselor educators.

Clinical mental health counselors without rehabilitation backgrounds may also be increasingly placed in a consultant role as SDs performing psychiatric tasks increase in number. As the potential for SDs to be used with this population receives greater attention and research continues, it is important that counselors-in-training and counselor educators are aware of this intervention and apprised of the emerging research related to SDs and psychiatric SDs to ensure appropriate recommendations.

**Process-Related Findings**

Two interesting phenomenona arose during recruitment of panel members that provided additional insight into the stakeholder demographics, one related to the way the groups were originally conceptualized and one related to industry norms. The direct and indirect service professional groups were developed with the intention of actively including varying perspectives while still ensuring that some of those participants involved in the SD industry had direct client experience, as explained in Chapter 3. This also was designed to allow for those in roles that are not client facing to provide their experience. However, very early in recruitment, it became clear
that the overlap between roles in organizations and how long many potential participants had been involved in the industry made this particular division less helpful in practice than in theory. Additionally, while four handlers who did not also fit into another group were included in the study, it became clear the groups were not discrete. The group criteria were helpful in considering the relative weight of experience and to do more selective recruiting toward the end of the process. For example, when recruiting the last few participants, it was helpful to have an idea of the cumulative experience in industry and handling, so that while these groups were not discrete there was a clear understanding of what background was most important for remaining participants to have to compliment the rest of the panel.

A challenge which was more expected was identifying mental health or rehabilitation professionals with service dog experience. No providers were identified through Office of Vocational Rehabilitation and other Rehabilitation Service provider outreach. The most positive responses were that people had some vision support experience but not with SDs directly, and did not consider themselves eligible. Attempts to find experts in general assistive technology assessment willing to apply that to SDs were also not successful. The one Certified Rehabilitation Counselor participant involved in the study consistently commented on the lack of rehabilitation professional involvement in the process as a standard practice, as well as the lack of focus on the human side of the team equation that results from this lack of professional assessment and support. This participant explained in Round 2 in response to statements related to assessing handler suitability that, “No clinical professionals are ever involved in the process. As a professional rehabilitation counselor, I have personally helped dozens of individuals to either forward their goal of becoming a handler, or helped them to work on other priorities first. The foundations do not take any of this into consideration. It is all about the dog match.” This
statement supported the findings in the literature related to the need for additional education and a larger role for rehabilitation and other providers (Lamontagne et al., 2020; Modlin, 2000; Winkle et al., 2012). It is also supported by the finding that 100% of the panel endorsed the statement as a result of access challenges and lack of public knowledge. I personally have engaged in some form of advocacy or education work in my community at a strong (N = 12) or moderate (N = 2) level. This suggested the impact on handlers and industry professionals and the potential for pressure to advocate and represent the community. Given the statements handlers provided related to stigma and access concerns, this advocacy may present an additional stress for handlers.

Another result of the analysis relates to the development of a framework for understanding the SD intervention. The data in the literature can be largely understood through a biopsychosocial model, as previously discussed. This study was developed from a treatment phase model. However, some of the data from this study would be better explained by an ecological or systems model. For example, the categories of Treatment Teams (For Medical/Mental Health and Other Providers), and Legal and Policy Resources do not clearly fit into a biopsychosocial or treatment phase model focused on the handler. These types of categories and topics require a framework that accounts for the interactions between systems and settings in which the handler is operating. It is likely a framework that combines these various elements would be needed to fully explain SD phenomena, handler experiences, and the complexity of team outcomes.

The last finding that emerged from the process of conducting the Delphi was the importance of clear definitions and agreement, even within an expert group of SD stakeholders. Given the difficulty of establishing common definitions and terms described in Chapter 2 the
definition used created controversy for some participants. For example, one participant gave very strong feedback on the use of an “Assistance Dog” rather than SD. The lack of term uniformity is problematic because it can lead to a misunderstanding when it comes to the basic components of assessment, service delivery and outcomes.

**Recommendations**

A major research recommendation is that grounded theory is needed to better establish the way in which we think about and research SDs and SD teams. While using a practical lens and combining a biopsychosocial framework to consider SD impacts and a basic treatment model to frame the stages most relevant to frame the initial questions in this study was successful, the complexity of this intervention requires a clear theoretical framework. Such a grounded theory framework would provide a foundation for the development of assessments and outcome measures and would enhance the depth and relatability of content in training resources geared toward providers. It is also important based on the participant feedback around this research and research on SDs in general that such a study be congruent with SD community voices and needs.

Because this study focused on recommendations related to assessment, placement, and resource needs, the Biopsychosocial model presented in Chapter 2 was not used extensively in the analysis. The treatment plan model in figure 2-4 on page 42 was used to frame the initial questions for the study and to make sense of the participant responses (for example a participant responding to transfer training statement with elements for assessment). All areas of the model were addressed in this study with the exception of *Retirement or Loss and Potential Successor Dog Support*. There are a number of policy elements involved in team termination that determine whether the handler can keep an organization-trained SD after retirement and under what
conditions. Some handlers continue with the same organization or trainer while others do not, and some handlers do not decide to obtain a successor dog. This practice warrants further exploration for rehabilitation and mental health providers to better understand the many emotional and logistical challenges of such a transition for better support, as well as to provide recommendations for programs to improve handler experiences around this difficult transition.

Public policy frameworks will be important to frame future research that is more directly applicable to law or major policy implications. One example of such a framework is the Advocacy Coalition Framework (ACF). ACF was developed to address policy processes that are challenging due to goal conflicts, lack of standardization, or multiple actors from various system levels (Hoope & Peterse, 1993). This would address several of the challenges relevant to the SD industry and SD laws. There are three assumptions to ACF: 1) that policy making is done by specialists within a subsystem of policy, but these specialists are impacted by broader political and socioeconomic factors; 2) individual factors, motivators and interests that present challenges to changing normative beliefs or operations within a system; and 3) a reliance on “advocacy coalitions” as a method to effectively deal with multilevel systems made up of many actors (Sabatier & Weible, 2007). Future research could form the basis for the formation of new advocacy coalitions or identify existing advocacy coalitions that could be intentionally engaged for policy change.

Due to the difficulty in recruiting rehabilitation professionals already discussed and how necessary this perspective is (further addressed in limitations of the study), it is important to consider how to involve rehabilitation professionals in targeted ways that decrease the necessity of specialty knowledge regarding SDs. One approach would be to provide training about SDs as part of a focus group on developing assessment criteria. As research continues to progress, it
may also be possible to pinpoint the areas in which rehabilitation knowledge is particularly valuable and conduct survey research or other larger scale research with SD specific elements already defined by SD industry stakeholders. However, long-term it is important that rehabilitation professions be engaged to support policy, research, and development.

**Strengths of the Study**

This was the first Delphi study on SDs, and was unique in being broad in focus while still centered on the SD community. The need for this research was consistently reinforced through participant feedback, and it addressed a gap in the research and in guidance for counseling and rehabilitation practice. Common limitations of Delphi studies were avoided through the use of open questions in Round 1 and the lack of attrition. The retention of all participants was in part due to the clear communication of expectations with participants and in part due to the high level of engagement of the participants. This dedication further confirmed the importance of the study to those in the SD community. This allowed for participants to contribute their perspectives over multiple rounds and for the other panel members to consider the responses of the group, which is considered an advantage of Delphi studies. While I, as the researcher, maintained a role of facilitator rather than contributor and took steps to maintain trustworthiness during data collection, my lived experience as a SD handler has supported confidence in understanding participant responses and language and an in-depth analysis of the data post-collection.

**Limitations of the Study**

Although attempts were made to secure participation of mental health and rehabilitation providers as part of the initial panel, representation from these groups did not occur. As a result, a more robust discussion of industry policies and as related to rehabilitation or mental health counseling was lacking. This mirrors the industry more broadly, where a lack of advisement...
from individuals uniquely professionally suited to comment on disability concerns, assistive
technology assessment, and to conduct both treatment outcome and program evaluation research has prevented client-focused growth in the industry. Within the study this was reflected by an absence of more nuanced commentary on assessment criteria, particularly those related to mental health and disability areas, such as contraindications for placement or degree of social and employment support that is desirable for a potential handler before placement.

Because purposeful sampling for experience over generalizability is favorable in Delphi panel recruitment, the results of the study may not be reproducible with a different panel. The study was designed with a policy focus in order to bring up as many topics and ideas as possible for participants to comment on, but this also means that in any given area the depth of response may be missing. Future research as noted in the recommendation section is suggested in each area of interest generated by the panel and particularly in the development of assessments or more detailed recommendations from this research.

**Conclusion**

This research has identified preliminary ideas experts agree are important for consideration in the development of standards of care and other service supports for SD handlers. It has also generated a list of facilitators and barriers for SD handler outcomes and some areas in which further analysis and research are needed to form better understanding and recommendations. Because of the focus of the method on stakeholder input, the study was grounded in community priorities and needs. The study findings did not connect with the existing literature due to the focus on process and on current industry, policy and consumer needs, rather than on outcomes or narrow phenomena. The goal of the study was to generate a wide range of topics and ideas for consideration, and to include a variety of stakeholders with
diverse experiences and perspectives. Due in part to this approach, while some of the findings are actionable on a small scale at present, they should be considered interim findings and represent platforms for future research.
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https://doi.org/10.1016/j.yebeh.2008.05.011


https://doi.org/10.1037/ort0000254


https://doi.org/10.1016/j.yebeh.2019.02.001


https://doi.org/10.1080/09687599.2017.1307718


https://doi.org/10.1136/vr.103433


https://doi.org/10.1682/JRRD.2012.11.0216

https://doi.org/http://dx.doi.org/10.1111/dme.35_13048


https://www.psychdogpartners.org/resources/frequently-asked-questions

https://doi.org/10.1016/0020-7489(90)90106-S


https://doi.org/10.7748/ldp2010.05.13.4.12.c7758


https://doi.org/10.1053/seiz.2001.0656


https://doi.org/10.2752/175303713X13795775535896


or Candidate Facilities in the United States and Canada, and Non-accredited U.S. Facilities.


https://doi.org/10.1037/prj0000294


https://doi.org/10.1080/09638280110066316
Appendix A: Screening Survey

Emotional Support Animal is another name for a Service Animal.  (Critical Item)
  True
  False

Emotional support animals, service animals, and therapy animals are the same thing. (Critical)
  True
  False

Service dogs come from training programs and must be trained by professionals. (Critical)
  True
  False

Which is acceptable for a business to request to determine if a dog is a service dog? (Critical)
  A. ID card from a registry
  B. Proof of disability
  C. Proof of training
  D. Verbal confirmation
  E. All of the above
  F. None of the above

Service dogs are required to be registered and certified. (Critical)
  True
  False

Service dogs cannot ever be asked to leave a place of business.
  True
  False

Which of the following is distracting to a service dog?
  A. Petting the service dog
  B. Talking to the service dog
  C. Making eye contact
  D. A and B
  E. All of the above
  F. None of the above
Appendix B: Recruitment Email

Hello,

My name is Lynn Pierce and I am a third-year doctoral candidate in the Counselor Education and Supervision program at The Pennsylvania State University. I am conducting my dissertation research study about the elements of assessment, treatment planning, and care coordination that should be considered in developing standards of care for service dog handlers.

Because there is limited literature on this topic to inform practice, this study is intended to inform practice that will better support service dog handlers, provide insight into handler needs, and generate questions meriting further study.

I am seeking participants who meet one of the following criteria:

Service Dog Professionals (Direct Client Contact):
- Be a professional in the service dog industry with at least 5 years of experience
- Have experience working directly with service dog handlers in your role (at least 1 year)
- Experience with both team formation on ongoing support is preferred

Other Service Dog Professionals:
- Be a professional in the service dog industry with at least 5 years of experience who does not work directly with clients (administrative, legal, grant writing, accreditation, etc.)
- OR be a researcher of service dog topics with at least 2 peer reviewed publications
- OR submit a professional biography and brief statement of interest to the researcher

Service Dog Handlers:
- Be 18 or older
- Be a current or past handler of a program trained or owner trained service dog
- Have at least 5 years of service dog handling experience

Counselors and Direct Care Providers:
- CRC, LPC, or equivalent license/certification with at least 5 years of experience
- Completion of the service dog knowledge screening survey provided by the researcher

In addition, all participants should be interested in the topic, and have the time to commit to participating in the research. While it is challenging to provide an estimate of how much time rounds will take because participants will be responding to information generated by the panel, 1-3 hours per round is expected. Interested individuals should be located in the United States, or very familiar with the laws and definitions pertaining to service dogs in the US to ensure uniformity of terms.

This study will be a four round Delphi study and has been approved by the Institutional Review Board. The rounds and schedule are outlined below:
Round 1: Participants respond to five open ended prompts, to generate the information further explored in the next two rounds.
Round 2: The researcher compiles group statements (all statements/participant feedback remain anonymous) from Round 1 and participants respond to these statements, providing commentary, suggestions for edits, or reflections.
Round 3: Based on statements collected and adjusted through the first two rounds, participants mark which statements they agree with and disagree with.
Round 4: Participants are provided with results compiled from Round 3 and are invited to provide any final comments.

| August 15-30 | Round 1 |
| Oct 1-15 | Round 2 |
| Nov 1-15 | Round 3 |
| Dec 1 | Round 4 |

If eligible and willing, please contact me at klynnpierce@psu.edu. Or, if you know any other individuals who fit my sample criteria, I would sincerely appreciate it if you sent this email to them as well.

Thank you,
K. Lynn Pierce, M.S., NCC, CRC
Appendix C: Round 1 Questionnaire

Instructions: The following questions are designed to seek your personal and professional opinion. They are intentionally broad, and there is no correct way to respond. Please reply to each question to the best of your ability, understanding that the panel responding is made up of people with different roles and experience. You may not have as much experience with some questions, but all contributions are important to improve the feedback in the upcoming surveys. Do not feel limited in the length or style of your answers but please provide sufficiently detailed responses so that I can better understand your narrative statements.

*Finally, please remember that your written responses to any of the research questions will remain anonymous so that no statements/ideas can be attributed to any specific panel member.*

**Question 1**
What do you think are vital issues for understanding service dog handler experiences? What is key knowledge for healthcare/mental health providers working with handlers?

**Question 2**
What do you believe should be considered to assess handler suitability when someone is considering a service dog? What qualities and factors are most important to determine eligibility as a handler?

**Question 3**
In your opinion, what considerations are necessary for team formation/transfer training related to the handler’s abilities or development of the team dynamic?
3.a) If possible, give examples of strategies you have used or seen that facilitate this transition to a working team.

**Question 4**
What support do handlers need long term? What resources (economic, informational, material, etc.) may currently be lacking?

**Question 5**
In your opinion, what either contributes to or prevents team success (or other good outcomes)? Consider such factors as handler traits, team chemistry, interpersonal dynamics and physical settings.

Other Comments
Is there anything that was not asked that you would like to provide your thoughts and opinions on?
Appendix D: Round 2 Questionnaire

**Instructions:**
Please provide a response to the following statements. Even a “yes- agreed!” type response is more helpful for me than a blank, because it helps me know the statement may not need to be adjusted. Where you have additions to a statement, or a small part of a statement you don’t agree with, please note that. Another way to think about this is you are leaving the statement ‘as is’ or making edits that would make it match your experience/perspective better. A few of the statements might be more divisive, and I’d really like to hear your thoughts/reactions to anything that provokes a strong response for you (positive or negative).

If you don’t have any experience with a statement, or don’t have more to contribute than you did in the first round, please leave items blank but still do submit the survey, so that we still have your voice in round 3 where you’ll be ranking your agreement level with the statements we’ve generated together.

**General Information**

**General:**
Handlers of owner trained dogs and program/organization trained dogs will have different experiences and needs.

Service dogs should help make the handler's life easier and improve the quality of life, but pressures on the handler and negative experiences can take away from this focus.

Getting a service dog is a major adjustment and comes with many responsibilities (care, training maintenance) beyond having a pet, which handlers may not be prepared for.

The bond between a handler and service dog is a symbiotic partnership. The dog is an extension of the handler reducing disability related barriers, and the handler provides stability for the dog.

**Access Denials and Stigma:**
Lack of education about service dogs in the general public can lead to access denials and judgmental comments.

People do not understand that service dogs are not pets, are working dogs, and are vital medical equipment helping their handlers live independent lives.

Handlers experience unwanted/negative attention in public and are expected to be ready and able to educate people and self-advocate.

Challenges with access and acceptance can be time consuming and emotionally draining.

When family/friends are not supportive or exclude the handler due to their service dog it can cause rifts in the family and leave the handler isolated.
For Medical/Mental Health and Other Providers:
It is important for both providers and handlers to have realistic expectations about service dogs. They are not instant cures, and while they can be a very helpful addition to other treatment they are not a substitute for continued care or use of other disability aids.

Providers need to understand the role of service dogs and that psychiatric service dogs are not emotional support animals.

Providers should seek education on how service dogs improve handler's quality of life and independence.

Providers need to understand and have training in trauma and disability issues, as well as an understanding of the impact of invisible disabilities.

Providers should understand the diverse and varied experiences and needs of people with disabilities and that service dogs are not all alike.

Providers need to speak to handlers respectfully and treat them as individuals who will have their own boundaries regarding interactions with their service dog.

Providers must have knowledge of service dog etiquette. They should not pet, talk to or distract the dog, ask intrusive questions, or question the necessity/legitimacy of the dog.

Providers need to understand that interacting with/distracting a service dog without the handler's permission can be harmful to the handler and the dog.

When assessing the suitability of a potential handler, a provider needs to be prepared to have an honest conversation about whether the potential handler is able to take on the responsibility of a service dog and provide the care a service dog needs.

Providers need to be able to evaluate when someone might benefit from a service dog even when a disability is invisible, while also recognizing that if someone is not ready or not a good candidate for a service dog then the service dog may make the individual’s situation worse.

Assessment of the social supports a potential handler will have is very important, and providers need to recognize that they are part of that support.

Industry/Program Related Issues:
Financial barriers to getting a service dog are an equity issue in the industry because marginalized groups may be disproportionately excluded from program involvement based on finances. People with disabilities are also at risk for financial instability, which may result in placed dogs being surrendered.
The use of non-traditional breeds to stand out or as a marketing tool for a program may result in the placement of dogs that are not well bred or suited to service dog work, disappointing handlers.

When and whether the handler/client obtains complete ownership of the dog is important.

The tone of contact with and the culture of a program can have significant negative impacts on a client/handler if they feel the program is overbearing, that handlers are always at fault for issues that arise, or if they feel that continued possession of the dog is threatened for minor mistakes.

A program/organization may want to provide lifetime support and additional services to clients, but there are serious constraints based on staff hours, number of staff, and finances.

There are certain groups (such as those with multiple co-occurring conditions, dual-sensory impairments, and those with mental health concerns) who are currently under-served by the service dog industry.

“Any dog can be a service dog” messaging is misleading and may be harmful for owner trainers.

**Handler Assessment**

**General:**
Assessing a person for suitability as a handler is essential for ultimate team success but is challenging and relies on many variables.

Overall suitability considerations and desirable factors for a potential handler will depend to some degree on the potential handler’s disability and the dog’s task work.

Love of dogs and the ability to connect with dogs is important, but is not enough to indicate a potential handler will be successful.

A primary consideration is the potential handler/client's need for a service dog for independence not available through other treatment or assistive technology, and the likelihood that the dog will be used on a regular basis.

**Dog Welfare and Care:**
Serious contraindications for the safety of the placed dog include any history of abuse of animals or other humans, active suicidality, anger management concerns, or a living environment that would be unsafe.

Potential handlers should have the ability to independently care for a dog, and/or a plan for how they will get assistance caring for the dog in case they are unable to.

Potential handlers must have the financial stability to care for the dog.
Providing the dog with enough physical and mental stimulation along with sufficient downtime to relax and be off duty is important.

**Basic Handler Screening:**
A home visit and interviews with family members, close friends, or treatment team members in advance of acceptance into a program is advisable. This allows for more accurate knowledge and a chance to provide feedback to potential handlers who may not be ready to be matched with a service dog, but could improve their suitability through counseling, training, or other growth opportunities.

A medical or mental health professional’s recommendation may be helpful in some situations, but a blanket requirement may not be advisable.

Even for a person who would otherwise be a good candidate to work with a service dog, timing may not be right if there is an expectation of major family, job, or housing changes.

Individuals who have had time to adjust to their diagnosis and attempt other treatment are more likely to be aware of symptom presentation and needs a service dog could support, and have had an opportunity to demonstrate consistency/follow-through in their adjunctive care.

It is important for potential handlers to be behaviorally stable, with a high level of self-care. Independent handling is essential, and for individuals unable to handle a dog (mentally, physically, or due to age) another person needs to be identified to be the handler of the dog.

For potential guide dog handlers, established independence in orientation and mobility skills, including in unfamiliar settings, are essential before being considered for placement with a dog.

It is important for a program/trainer to consider early on if a potential handler/client is capable physically, mentally, and emotionally of meeting the expectations of the training program, if accommodations can be made (such as individual instead of group training or additional contact hours), or if the client will not be able to be successful in the training approach the program/trainer can offer.

**Handler Readiness and Commitment:**
A potential handler must have a desire to improve their life and health, and be ready to be responsive to the dog's cues.

A potential handler needs to be able to be in control of a dog at all times, and willing to put the dog's needs and safety first when needed.

A potential handler must be ready to commit to put in the time and effort it takes to make a service dog partnership work, including ongoing training and troubleshooting in addition to the care and attention the dog will require.

**Handler Expectations:**
Potential handlers need to be prepared for the amount of work a service dog requires and how different it is from having a pet.

Potential handlers need to be fully prepared for the challenges they may encounter as a handler such as access issues, unwanted attention, people staring and approaching.

Potential handlers need to be ready for a service dog to make their disability visible or to change their disability presentation socially.

Potential handlers need to expect that there will be setbacks both they and the dog will make mistakes. Being prepared to work through challenges with a return to foundational training is important

**Resources Handlers Need**

**Legal/Policy:**
A lawyer and current information on access laws and legal changes is important for handlers and should be provided through programs/trainers where applicable.

A nationally recognized certification or ID process based on a Public Access Test would decrease stress of service dog teams through a reduction of fake service dogs.

**Program/Trainer Support:**
Over the duration of a dog's working life, a handler's needs may change, requiring the training of new skills/tasks for the dog.

Continued support from trainers/programs over the working life of the dog is important. While the amount of support needed by teams will vary, handlers need to be able to ask questions when concerns come up and have access to training support in person, via video, etc.

A trainer/program in continued contact with a team may also notice warning signs of task training not being maintained or problematic behaviors developing that the handler is not yet aware of and be able to provide early intervention.

Alumni engagement (through invitations to trainings/group outings, a newsletter, etc) can be helpful in providing community.

**Social Support:**
It is important for handlers to have service dog community and social support to ask questions and be better understood because being a service dog handler can be isolating.

Support of family or friends is also important and can be necessary to support care of the service dog in emergencies.

**Financial Support:**
Service dog handlers need access to financial support (from programs or other sources) to assist with care needs, particularly the costs associated with vet care and illness/injuries.

Programs/organizations should have an emergency vet fund.

Other financial support may be needed for fundraising or for travel to annual testing.

**Team Formation**

**Initial Matching:**
The dog's performance of general obedience with multiple trainers, appropriate temperament, and ability to perform the tasks required by the handler (including working around relevant assistive equipment) is a basic requirement for team matching/formation.

Signs of initial fit of dog and handler (dog not stressed by handler, general personality match) are important for later team bond and should be assessed with the dog and handler interacting before selection is finalized.

Matching should be done carefully with the input of many people who know the dog and the handler where possible.

A good match takes into account many factors, including the dog's personality, strengths, weaknesses, temperament, training, and natural talents paired with the potential handler's task needs, activity level, lifestyle, home and work environments, and personality.

There may be outside factors, such as financial pressure, management priorities, donors with specific parameters, etc. that could lead to dogs being matched too early or without appropriate skill, to individuals who are not ready or may not excel as handlers.

**Building Relationship:**
Very early on, the dog and handler should get to know each other through games and playing and low stress activities.

It is important that the team trusts each other and communicates well. It is especially important that the dog have trust in the handler.

It is important that the handler is the sole caretaker of the dog (in the first months or ongoing) and that all food, care, and the majority of interaction comes from the handler.

Building a team bond is an active and ongoing process, independent of maintaining training.

**Building Confidence:**
As the team becomes accustomed to each other, known tasks in familiar environments can build confidence.
As much as possible, a program or trainer should practice similar outings to the handler's week to week life or expose the team to the actual daily environments they will encounter with trainer support.

The handler must learn how to 'lead/steer' tasks confidently and have a degree of comfort working in public places for successful transfer of the dog to the handler/client.

**Pace/Structure of Transfer Training:**
Initial training on topics like dog behavior, dog body language, and basic cues could be taught even before being matched with a dog, to allow for more focus on team bond and application after team selection and less cognitive load on handlers/clients trying to take in a lot of new information.

It may be important due to disability concerns for programs not to have a one-size approach to transfer training: for example, an intensive over many days may not be physically or emotionally possible, and the repetition needed to build skill and confidence may take months or years of smaller doses of training, especially for new handlers.

Some type of one-on-one training element is important to prevent bad matches and provide the individual support necessary for confident teams.

It is important to identify teams that may need additional support and provide a clear process/dedicated contact for teams to get additional support, particularly for the first year with new handlers.

**Facilitators and Barriers to Positive Experiences and Outcomes**

**Facilitators That Improve Chances of a Good Overall Outcome/Experience:**
- A good basic match of needs/personalities and chemistry between the handler and the dog
- Trust between team members and a supportive team bond
- A handler who wants help and is ready for the responsibility
- Commitment to the process and the relationship from the handler
- Handlers that are willing to learn and receive constructive feedback
- A willingness to put the dog and the team’s needs first
- Follow-up communication and contact with the organization or trainer (at least annually)
- The skill and experience of the trainer/organization with the type of work needed

**Barriers that Reduce Chances of a Good Overall Outcome/Experience:**
- Unexpected changes such as those to a handler's personal life, loss of support people, or changes in financial stability
- Lack of education regarding service dogs in the general public
- Poor dog temperament or health
- Poor team communication (not giving the dog breaks, not having good positive feedback)
- Unreasonable expectations of dog behavior (the dog must be perfect)
- Not using the service dog or not maintaining training
- Others interfering with the team (strangers or family/supports)
Fixating on mistakes
A program/trainer that is not a good fit or is not operating ethically
Appendix E: Round 3 Questionnaire

Instructions:

Please complete the following survey.

Most questions provide a 4-point scale of agreement plus an option for those questions you may not have experience with. A few questions geared more toward the handlers ask how frequently you’ve had certain experiences.

Please do use the “no experience” option where it is appropriate for you. Having answers to all questions will greatly help the accuracy of the data analysis.

The last two questions will ask you to rank order the importance of the list of facilitators and barriers.

Question on Definitions:

In the feedback there was some concern about language being used for service dogs.

Due to the lack of common definition across settings/organizations/countries and some current challenges with the term 'assistance animal' being used for ESAs in higher education policy (with Higher Ed the likely audience in the short term) 'service dog' has been used as a universal term for all types of assistance animals including guide, hearing, mobility, medical and psychiatric response dogs.

However, I know language is a huge challenge both within the community and in current research, so I’d like to ask you to note the definition(s) you use below:

1. A 'service dog' is any dog used for the purposes of disability support (i.e. 'service animal' in the ADA definition)
2. I use this definition, but I use 'assistance animal or assistance dog'
3. A service dog provides medical or psychiatric task work, while an assistance dog provides guide or hearing task work
4. A service dog provides any non-guide related task work, but I use the terms guide dog and service dog to define this difference
5. A service dog is what I call a dog meeting the definition in the ADA, but assistance dog includes a broader group of dogs such as therapy/facility dogs and possibly ESAs
6. An assistance dog is what I call dogs meeting the definition in the ADA, and service dogs are military or K9 units
7. I use some other definition or would like to add another definition I am aware of but do not use

General Information
Handlers of owner trained dogs and program/organization trained dogs will have some different experiences and needs, particularly during the training phase.

<table>
<thead>
<tr>
<th>Statement</th>
<th>I strongly agree</th>
<th>I moderately agree</th>
<th>I minimally agree</th>
<th>I disagree</th>
<th>I have no experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handlers of owner trained dogs and program/organization trained dogs will have some different experiences and needs, particularly during the training phase.</td>
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<tr>
<td>Needs for handlers of owner trained dogs and program/organization trained dogs may be different due to different types of support available, but their experiences as handlers in public post-training/placement will be similar.</td>
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<tr>
<td>Service dogs should help make the handler's life easier and improve the quality of life, but pressures on the dog and handler and negative experiences can take away from this focus.</td>
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<tr>
<td>Access Denials and Stigma</td>
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<tr>
<td>Lack of education about service dogs in the general public can lead to access denials and judgmental comments.</td>
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</table>
Access denials are sometimes rooted in business' experiences with fake dogs

Access denials are sometimes rooted in business' biased belief that service dogs are fake (not based on past experience or the current behavior of the dog in question)

Cultural biases may also contribute to access denials.

Certain types of handlers experience disproportionate bias due to their disability- for example psychiatric service dog handlers.

Certain industries such as the travel industry may present more challenges to handlers. For example, handlers may be more likely to encounter barriers such as being asked for documentation of some kind in renting a vacation home or hotel room than in other public access situations.

Many people do not understand that service dogs are not pets but are working dogs essential to their handlers living independent lives.
I strongly agree with this statement (no changes required)       I moderately agree with this statement (small changes required)       I minimally agree with this statement (could agree with some moderate changes)       I disagree with this statement (no level of agreement)       I have no experience with this statement

Service dogs are vital medical equipment.

Handlers often experience unwanted/negative attention in public.

The attention handlers experience in public is positive or can be seen as positive if the handler has reasonable expectations for public interactions

It is the handler's responsibility to be ready and able to educate the general public and to self-advocate calmly and professionally as an ambassador.

This expectation placed upon handlers who may not have the time, energy, or skills to self-advocate is unfair.

Challenges with access and acceptance can be time consuming, emotionally draining, and embarrassing.
When family/friends are not supportive or exclude the handler due to their service dog it can cause rifts in the family and leave the handler isolated.

<table>
<thead>
<tr>
<th>I strongly agree with this statement (no changes required)</th>
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<th>I disagree with this statement (no level of agreement)</th>
<th>I have no experience with this statement</th>
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</table>

**Handler Experiences**

As a result of access challenges and lack of public knowledge, I personally have engaged in some form of advocacy or education work in my community.

<table>
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<tr>
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<th>I have no experience with this statement</th>
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</table>

I have experienced access challenges or negative interactions when working with my service dog in public.

<table>
<thead>
<tr>
<th>Almost Always</th>
<th>Often</th>
<th>Sometimes</th>
<th>Almost Never</th>
<th>I have no experience with this statement</th>
</tr>
</thead>
</table>

I have experienced people interfering with or petting my service dog without permission.

<table>
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<tr>
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<th>Sometimes</th>
<th>Almost Never</th>
<th>I have no experience with this statement</th>
</tr>
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</table>

I have experienced other harassment such as being photographed in public without my permission.

<table>
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<th>Often</th>
<th>Sometimes</th>
<th>Almost Never</th>
<th>I have no experience with this statement</th>
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</table>

Due to access challenges I have personally experienced negative consequences such as not being invited out by friends following an incident.

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<tr>
<th>Almost Always</th>
<th>Often</th>
<th>Sometimes</th>
<th>Almost Never</th>
<th>I have no experience with this statement</th>
</tr>
</thead>
</table>
Due to access challenges or the anxiety of having an access challenge I sometimes "pick my battles" and avoid settings I have the legal right to enter.

<table>
<thead>
<tr>
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<th>Often</th>
<th>Sometimes</th>
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</tr>
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**For Medical/Mental Health and Other Providers**

*In the following section "Provider" refers to a medical, mental health, or related care professional.*

It is important for both providers and handlers to have realistic expectations about service dogs. They are not instant cures, and while they can be a very helpful addition to other treatment they are not a substitute for continued care or use of other disability aids.

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Providers need to understand the role of service dogs and that psychiatric service dogs are not emotional support animals.

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Providers should seek education on how service dogs improve handler's quality of life and independence.

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<th>I disagree with this statement (no level of agreement)</th>
<th>I have no experience with this statement</th>
</tr>
</thead>
</table>

It is particularly important that providers be knowledgeable about service dogs prior to recommending a service dog for a patient, as is typical with other treatment/medication options.

<table>
<thead>
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Providers need to understand and have training in trauma and disability issues, as well as an understanding of the impact of invisible disabilities.
Providers should understand the diverse and varied experiences and needs of people with disabilities and that service dogs are not all alike.

Providers need to speak to handlers respectfully and treat them as individuals who will have their own boundaries regarding interactions with their service dog.

Providers must have knowledge of service dog etiquette. They should not pet, talk to or distract the dog, ask intrusive questions, or question the necessity/legitimacy of the dog (this assumes the provider is not actively involved in the placement process, for example if in an urgent care setting or other unrelated care).

Providers need to understand that interacting with/distracting a service dog without the handler's permission is rude and can be harmful to the handler and the dog.

When assessing the suitability of a potential handler, it would be ideal if a provider could have an honest conversation about whether the potential handler is able to take on the responsibility of a service dog and provide the care a service dog needs and fully outline the risks and benefits of a service dog as part of a treatment plan.
Providers need to be able to evaluate when someone might benefit from a service dog even when a disability is invisible, while also recognizing that if someone is not ready or not a good candidate for a service dog then the service dog may make the individual’s situation worse.

Providers do best when they work in conjunction with a service dog organization and are already educated or willing to learn.

Providers should trust the judgement of a trainer/program/organization and not conduct an evaluation.

Providers should trust the judgement of a patient/potential handler and not conduct an evaluation.

The question of the exact role a provider should play in evaluation and how much control they should have is complicated.

Medical/mental health providers need to recognize that they play a role in the support system of a service dog team.

More extensive education and availability of training is required for medical and mental health providers in order to satisfy the above recommendations.
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I have personally had negative interactions with mental health or medical providers due to lack of knowledge or breach of service dog etiquette.

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**Industry/Program Related Issues**

Financial barriers to getting a service dog are an equity issue in the industry because marginalized groups may be disproportionately excluded from program involvement based on finances.

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People with disabilities are also at risk for financial instability, which may result in placed dogs being surrendered.

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Potential handlers should do their research before committing to a service dog program, and because of the complexity of the industry and issues around scams/unethically operating programs clear regulations or support for consumers/potential clients would be beneficial to prevent harm.

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When and whether the handler/client obtains complete ownership of the dog is important.

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Having ownership of the dog may help give some handlers peace of mind.

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Handlers should obtain ownership of the dog upon completion of training.

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Handlers should not obtain ownership of the dog until retirement (if ever).

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It is essential from an operational perspective that a program or organization provides lifetime support for a team.

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It is not important for a program/organization to provide lifetime support for teams

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A program/organization may want to provide lifetime support and additional services to clients, but there are serious constraints based on staff hours, number of staff, and finances.

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The tone of contact with and the culture of a program can have significant negative impacts on a client/handler if they feel the program is overbearing, that handlers are always at fault for issues that arise, or if they feel that continued possession of the dog is threatened for minor mistakes.
Handlers may be used by some organizations as charity cases or mascots for fundraising purposes, or handlers who are more sympathetic cases for donors may have a better chance of being accepted into a program.

There are certain groups (such as those with multiple co-occurring conditions, dual-sensory impairments, and those with mental health concerns) who are currently under-served by the service dog industry.

Bias and ableism is a concern in the service dog industry (against specific disability types, due to lack of representation of disabilities being served in program/organization leadership, etc.)

The use of non-traditional breeds to stand out or as a marketing tool for a program may result in the placement of dogs that are not well bred or suited to service dog work, disappointing handlers.

“Any dog can be a service dog” messaging is misleading and may be harmful for owner trainers.
General Handler Assessment

Assessing a person for suitability as a handler is essential for ultimate team success but is challenging and relies on many variables.

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Overall suitability considerations and desirable factors for a potential handler will depend to some degree on the potential handler’s disability and the dog’s task work.

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Love of dogs and the ability to connect with dogs is important, but is not enough to indicate a potential handler will be successful.

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A primary consideration in screening is the potential handler/client's need for a service dog for independence not available through other treatment or assistive technology.

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A service dog does not need to be the last option, but whether it is the best option remaining after other treatments have been attempted is a valuable question

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The likelihood the dog will be used by the potential client should be strongly considered.

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Dog Welfare and Care
Serious contraindications for the safety of the placed dog include any history of abuse of animals or other humans, anger management concerns, or a living environment that would be unsafe.

Any history of suicidality should be considered a contraindication for placement of a service dog.

Only acute and recent (for example hospitalized for an attempt in the past 6 months) suicidality should be considered as a contraindication.

Potential handlers should have the ability to independently care for a dog. If 100% independent care is not anticipated, there must be a plan for how they will get assistance caring for the dog at these times (family or an available support system, for example).

Potential handlers must have the financial stability to care for the dog.

Programs assessing financial stability as part of determining whether to accept a potential handler as a client must take into account the financial barriers related to disability.
A program requesting proof of assets or having a set income requirement well beyond general food, care, and regular vetting requirements is not an appropriate practice.

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Providing the dog with enough physical and mental stimulation along with sufficient downtime to relax and be off duty is important.

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**Basic Handler Screening**

A home visit and interviews with family members, close friends, or treatment team members in advance of acceptance into a program is advisable. This allows for more accurate knowledge and a chance to provide feedback to potential handlers who may not be ready to be matched with a service dog, but could improve their suitability through counseling, training, or other growth opportunities.

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Home visit requirements may present barriers to handlers who are estranged from family, for example due to trauma or abuse.

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A medical or mental health professional’s recommendation, assessment, or collaboration with the organization may be helpful in some situations.

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A medical or mental health professional should be required to provide documentation of disability.
Requiring medical/mental health documentation as part of the assessment process of a trainer, program, or organization represents a barrier to potential handlers.

Even for a person who would otherwise be a good candidate to work with a service dog, timing may not be right if there is an expectation of major family, job, or housing changes.

Individuals who have had time to adjust to their diagnosis and attempt other treatment are more likely to be aware of symptom presentation and needs a service dog could support, and have had an opportunity to demonstrate consistency/follow-through in their adjunctive care.

It is important for potential handlers to be behaviorally stable, with a high level of self-care.

Independent handling is essential, and for individuals unable to handle a dog (mentally, physically, or due to age) another person needs to be identified to be the handler of the dog.

Assessment of the social supports a potential handler will have is very important.
For potential guide dog handlers, established independence in orientation and mobility skills, including in unfamiliar settings, are essential before being considered for placement with a dog.

Although not as commonly discussed, other disabilities may have their own specific prerequisites prior to placement with a service dog (for example, blood glucose management in diabetes or appropriate physical therapy for mobility concerns).

It is important for a program/trainer to consider early on if a potential handler/client is capable physically, mentally, and emotionally of meeting the expectations of the training program, if accommodations can be made (such as individual instead of group training or additional contact hours), or if the client will not be able to be successful in the training approach the program/trainer can offer.

### Handler Readiness and Commitment

A potential handler must have a consistent desire to manage their symptoms and health.

A potential handler must be ready and able to be responsive to the dog's cues.
A potential handler needs to be able to be in control of a dog at all times, and willing to put the dog's needs and safety first.

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A potential handler must be ready to commit to put in the time and effort it takes to make a service dog partnership work, including ongoing training and troubleshooting in addition to the care and attention the dog will require.

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**Handler Expectations**

Potential handlers need to be prepared for the amount of work a service dog requires and how different it is from having a pet.

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Potential handlers need to be fully prepared for the challenges they may encounter as a handler such as access issues, unwanted attention, people staring and approaching.

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Potential handlers need to be prepared for the reality that a service dog may increase the visibility of their disability or change their disability presentation socially.

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Potential handlers need to be prepared for setbacks and that both they and the dog will make mistakes. Being prepared to work through challenges with a return to foundational training is important.
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### Legal and Policy Resources

Current information on access laws and legal changes is important for handlers and should be provided through programs/trainers where applicable.

Programs/organizations should provide access to legal support for clients encountering access challenges or seeking support in navigating change of housing/employment.

Service dog training programs/organizations should not provide legal services due to financial constraints, but disability support organizations like National Foundation for the Blind or other large organizations should provide legal support.

Handlers need access to information on disability rights and advocacy services.

A nationally recognized certification or ID process would decrease stress on service dog teams.

Such a certification would result in a reduction of fake service dogs.
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**Such a certification would help eliminate access challenges**

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**A Public Access Test would be a good starting requirement for such a nationally recognized certification/ID process**

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**There could be serious issues with the fair and equitable implementation of any standardized identification program.**

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**Focusing on education for the general public is more likely to eliminate challenges handlers face than attempting to implement a certification/ID program.**

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**Program/Trainer Support**

Over the duration of a dog's working life, a handler's needs may change, requiring the training of new skills/tasks for the dog.

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A handler's needs changing may also result in early retirement of a service dog.
Continued support from trainers/programs over the working life of the dog is important. While the amount of support needed by teams will vary, handlers need to be able to ask questions when concerns come up and have access to training support in person, via video, etc.

A trainer/program in continued contact with a team may also notice warning signs of task training not being maintained or problematic behaviors developing that the handler is not yet aware of and be able to provide early intervention.

When providing continued support, trainers/programs need to make sure that the methods do not appear overbearing or become stressful to the handler. One way to accomplish this is making sure that outside of continuing expectations such as scheduled testing handlers initiate follow-up contact.

Alumni engagement (through invitations to trainings/group outings, a newsletter, etc) can be helpful in providing community.

Peer mentor programs are also valuable especially for new handlers

Social Support
It is important for handlers to have service dog community (official interest groups, Facebook groups, etc.) for social support and to ask questions of peers with similar experiences.

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Being a service dog handler can be isolating.

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Support of local family or friends is important and can be necessary to provide care of the service dog in emergencies.

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Non-traditional emergency plans involving neighbors, co-workers or others are suitable in the event of lack of family support.

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While family/friends are preferable in emergencies, if the dog is from a program/organization there should be an emergency support plan in place facilitated by the program/organization as backup

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**Financial Support**

Service dog handlers need access to financial support (from programs or other sources) to assist with care needs, particularly the costs associated with vet care and illness/injuries. This facilitates equal access, social justice, and provides a safety net.
Programs/organizations should have an emergency vet fund to support handlers post-placement.

It is not feasible for programs/organizations to afford such an emergency vet fund.

Support for required travel (such as for annual public access testing) should be provided by the training program/organization.

Support for required travel (such as for annual public access testing) is the handler's responsibility but should be something the handler is permitted to fundraise. For example, an organization should not disallow fundraising for travel costs in their contract.

Team Formation

Initial Matching
The dog's performance of general obedience with multiple trainers in a public/high distraction setting, appropriate temperament, and ability to perform the tasks required by the handler (including working around relevant assistive equipment) is a basic requirement prior to team matching/formation.

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Signs of initial fit of dog and handler (dog not stressed by handler, general personality match) are important for later team bond and should be assessed with the dog and handler interacting before selection is finalized.

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Matching should be done carefully with the input of more than one person.

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Programs tend to know the history and temperament of the dog, but need to take more care in getting to know the personality and specific needs of the handler.

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A good match takes into account many factors, including the dog's personality, strengths, weaknesses, temperament, training, activity level, and natural talents paired with the potential handler's strengths, weaknesses, task needs, activity level, lifestyle, home and work environments, support network (including family), and personality.

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There may be outside factors, such as financial pressure, management priorities, donors with specific parameters, etc. that could lead to dogs being matched too early or without appropriate skill, to individuals who are not ready or may not excel as handlers.
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### Building Relationship

Early in the team's relationship, the dog and handler should get to know each other through games and playing and low stress activities.

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<th>I minimally agree with this statement (could agree with some moderate changes)</th>
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<th>I have no experience with this statement</th>
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It is important that the team develops trust in each other and communicates well.

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It is most important for the handler to have trust in the dog.

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It is most important for the dog to have trust in the handler.

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It is important that the handler is the sole caretaker of the dog (in the first months following official placement or ongoing) and that all food, care, and the majority of interaction comes from the handler.

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For handlers with families/children, or for dogs paired with minors it is important to find ways for the dog to be part of the family and bond with other family members, while not disrupting training.
Building a team bond is an active and ongoing process.

Assuming a good initial match, a team bond should develop organically and does not need to be actively worked on.

While training might support bond, activities to build team bond must be evaluated/considered independently from other training and maintenance.

Building Confidence

As the team becomes accustomed to each other, known tasks in familiar environments can build confidence.

As much as possible, a program or trainer should practice similar outings to the handler's week to week life or expose the team to the actual daily environments they will encounter with trainer support.

The handler must learn how to cue or lead tasks confidently and have a degree of comfort working in public places for successful transfer of the dog to the handler/client.
Pace/Structure of Transfer Training

Initial training on topics like dog behavior, dog body language, and basic cues could be taught even before being matched with a dog, to allow for more focus on team bond and application after team selection and less cognitive load on handlers/clients trying to take in a lot of new information.

Given how many topics that do not involve hands-on interaction with the dog may be taught to handlers (dog behavior, dog care, laws, general expectations) zoom or asynchronous video materials are useful tools for programs to consider implementing.

It may be important due to disability concerns for programs not to have a one-size approach to transfer training: for example, an intensive over many days may not be physically or emotionally possible, and the repetition needed to build skill and confidence may take months or years of smaller doses of training, especially for new handlers.

It is essential that programs avoid a one-size-fits all approach because they serve disability populations.

Providing an individual approach is often not feasible for organizations due to financial, staffing, or other constraints.
### Facilitators and Barriers to Positive Experiences and Outcomes

**Instructions:** For the following 2 questions you will be provided with the list of facilitators and barriers generated in the last round. Please rank order each by typing numbers next to each item. Before each rank-order question, the list will be provided for easier review, or for those who would like a clean copy to paste into a word document to order their thoughts. The total number of items is also noted on the question.

**Facilitators That Improve Chances of a Good Overall Outcome/Experience:**
- A good basic match of needs/personalities and chemistry between the handler and the dog
- Trust between team members and a supportive team bond
- A handler who wants help and is ready for the responsibility
- Commitment to the process and the relationship from the handler
- Handlers that are willing to learn and receive constructive feedback
- A willingness to put the dog and the team’s needs first
- Supportive follow-up communication and contact with the organization or trainer
- The skill and experience of the trainer/organization with the type of work needed
- Education upfront on what the service dog can do for the individual and reasonable expectations
- An understanding of the costs related to the dog/training and any follow up
- A thorough and accurate assessment of potential handler success based on medical/mental health provider documentation
- Financial stability
- A support structure local to the handler

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Some type of one-on-one training element is important to catch failing/struggling team matches and provide the individual support necessary for confident teams.

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It is important to identify teams that may need additional support and provide a clear process/dedicated contact for teams to get additional support, particularly for the first year with new handlers.

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· Education in legal rights of teams and businesses plus legal options to navigate access denials
· Ongoing primary treatment where applicable (mental health counseling, medical support, etc)
· A good match between handler and program or trainer for the training process and program requirements
· Program/trainer transparency around policies and requirements and clear expectations for investment (financial and time)
· Annual assessment (such as a Public Access Test)

**Barriers that Reduce Chances of a Good Overall Outcome/Experience:**
· Unexpected changes such as those to a handler's personal life, loss of support people, or changes in financial stability
· Lack of education regarding service dogs in the general public
· Poor dog temperament or health
· Poor team communication (not giving the dog breaks, not having good positive feedback)
· Unreasonable expectations of dog behavior (the dog must be perfect)
· Not using the service dog or not maintaining training
· Others interfering with the team (strangers or family/supports)
· Fixating on mistakes
· A program/trainer that is not a good fit or is not operating ethically
· Inability to advocate for self and team
· Lack of appropriate level of care (not meeting mental stimulation needs, not addressing health concerns, working an overweight or injured dog)
· Lack of lifetime support from the trainer/organization, including emergency support (for program handlers)
· Significant trauma to the team, for example a dog attack
· Need for substantial retraining or "career change" for the dog, for example due to changing disability related needs
Appendix F: Round 4 Report

A Report of Preliminary Findings for the Delphi Study

Composite Experience of the Delphi Panel

The 14 member panel (8 women, 6 men ages 28-69) reported the following composite experience:

- Experience working with or training service dogs in 8 US states and 2 additional countries
- Experience across a total of 16 unique service dog programs
- 9 reported being a service dog handler
  - 95 cumulative years of handling experience
  - Breakdown by type:
    - 3 guide dog handlers
    - 2 hearing dog handlers
    - 4 combined use handlers
      - 1 psychiatric/medical alert handler
      - 1 psychiatric/mobility support handler
      - 1 mobility support/medical alert handler
      - 1 psychiatric/mobility support/medical alert handler
- 7 reported being employed or volunteering in the service dog industry in a range of roles from board secretary to trainers to general volunteers
  - 74 cumulative years of industry experience
- 1 member was a Licensed Professional Counselor
- 1 member was a Certified Rehabilitation Counselor
  - 35 cumulative years of clinical experience
  - Both of these individuals are also handlers
- Other experience reported by panel members included
  - 2 members who wrote PhD dissertations on service dog topics
  - 2 members with law degrees
  - 2 retired educators

Summary of Rounds and Categories

Round 1

In Round 1 the panel responded to the following open ended questions:

1. What do you think are vital issues for understanding service dog handler experiences? What is key knowledge for healthcare/mental health providers working with handlers?
2. What do you believe should be considered to assess handler suitability when someone is considering a service dog? What qualities and factors are most important to determine eligibility as a handler?
3. In your opinion, what considerations are necessary for team formation/transfer training related to the handler’s abilities or development of the team dynamic?
a. If possible, give examples of strategies you have used or seen that facilitate this transition to a working team.

4. What support do handlers need long term? What resources (economic, informational, material, etc.) may currently be lacking?

5. In your opinion, what either contributes to or prevents team success (or other good outcomes)? Consider such factors as handler traits, team chemistry, interpersonal dynamics and physical settings.

Round 2

Round 2 consisted of 76 statements generated from the responses to Round 1 across 6 sections:

1. General Information
2. Information for Medical and Mental Health Providers
3. Handler Assessment
4. Team Formation
5. Important Resources
6. Facilitators and Barriers to Positive Experiences and Outcomes

Participants were asked to provide any edits, clarification, or responses to the statements, or to express agreement with the statement as it was constructed. For section 6, participants presented with a list of facilitators and a list of barriers generated from the group responses in Round 1 and asked to make any edits/additions to the list overall.

Round 3

Changes and additions from the Round 2 narrative feedback resulted in Round 3 having:

- An initial question on service dog definition and how people on the panel use different terms in their own work/with their organizations
- 140 statements for endorsement
- 8 Sections:
  1. General Information (5 statements)
  2. Access Denials and Stigma (14 statements)
     a. Handler Experiences (6 experience based statements)
  3. Information for Medical/Mental Health and Other Providers (17 endorsement statements + 1 experience based, 18 statements total)
  4. Industry/Program Related Issues (16 statements)
  5. Handler Assessment
     a. General Handler Assessment (6 statements)
     b. Dog Welfare and Care (8 statements)
     c. Basic Handler Screening (13 statements)
     d. Handler Readiness and Commitment (4 statements)
     e. Handler Expectations (4 statements)
  6. Important Resources
a. Legal and Policy Resources (10 statements)
b. Program/Trainer Support (7 statements)
c. Social Support (5 statements)
d. Financial Support (6 statements)

7. Team Formation
   a. Initial Matching (6 statements)
   b. Building Relationship (9 statements)
   c. Building Confidence (3 statements)
   d. Pace/Structure of Transfer Training (7 statements)

8. Facilitators and Barriers to Positive Experiences and Outcomes *
   ● 7 statements focused on gathering experiences (as a subsection of the Access section and one in the medical providers section)
   ● * 2 lists for rank order sorting (completed by 12/14 panel members)
     ○ 18 facilitators of positive team outcomes generated by panel contributions
     ○ 14 barriers to positive team outcomes generated by panel contributions

Omission of Statements

No statements were omitted due to lack of panel experience, because all endorsement statements (and all but 1 experience-based statement) met a 50% threshold.

The rate of participant experience with the statements in the endorsement round was high. At a 20% threshold, meaning an item would be omitted if only 20% of the panel reported having no experience with a statement, only 25 of the 140 statements would be omitted (18%).

Statements Endorsed with High Agreement

The following thresholds for agreement are reported:

● 100% at strongly agree
● 90% at strongly agree
● 80% at strongly agree
   ○ For all thresholds, the (*) symbol preceding a statement indicates that it is included at this level only when “no experience” responses are omitted.
   ○ Items already included in a prior list are placed first in their category in the successive lists and are italicized.

Statements Endorsed by 100% of Panel Members at a ‘Strongly Agree’ Level (8+1*):

For Medical/Mental Health and Other Providers

● Providers need to understand that interacting with/distracting a service dog without the handler's permission is rude and can be harmful to the handler and the dog.
• Providers need to speak to handlers respectfully and treat them as individuals who will have their own boundaries regarding interactions with their service dog.
• * Providers need to understand the role of service dogs and that psychiatric service dogs are not emotional support animals.

**Handler Assessment: Readiness/Commitment**

• A potential handler must be ready to commit to put in the time and effort it takes to make a service dog partnership work, including ongoing training and troubleshooting in addition to the care and attention the dog will require.

**Handler Assessment: Handler Expectations**

• Potential handlers need to be prepared for the amount of work a service dog requires and how different it is from having a pet.
• Potential handlers need to be prepared for the reality that a service dog may increase the visibility of their disability or change their disability presentation socially.

**Important Resources: Legal and Policy Resources**

• Handlers need access to information on disability rights and advocacy services.

**Team Formation: Building Relationship**

• It is important that the team develops trust in each other and communicates well.
• Building a team bond is an active and ongoing process.

*Statements Endorsed by 90% Of Panel Members at a ‘Strongly Agree’ Level (20+6*):*

**General Information**

• Getting a service dog is a major adjustment and comes with many responsibilities (care, training, maintenance) beyond having a pet, which handlers may not be prepared for.
• * Service dogs should help make the handler's life easier and improve the quality of life, but pressures on the dog and handler and negative experiences can take away from this focus.

**Access Denials and Stigma**

• Lack of education about service dogs in the general public can lead to access denials and judgmental comments.

**For Medical/Mental Health and Other Providers**

• * Providers need to understand that interacting with/disturbing a service dog without the handler's permission is rude and can be harmful to the handler and the dog.
• Providers need to speak to handlers respectfully and treat them as individuals who will have their own boundaries regarding interactions with their service dog.
● Providers need to understand the role of service dogs and that psychiatric service dogs are not emotional support animals.
● It is important for both providers and handlers to have realistic expectations about service dogs. They are not instant cures, and while they can be a very helpful addition to other treatment they are not a substitute for continued care or use of other disability aids.
● Providers should understand the diverse and varied experiences and needs of people with disabilities and that service dogs are not all alike.
● Providers must have knowledge of service dog etiquette. They should not pet, talk to or distract the dog, ask intrusive questions, or question the necessity/legitimacy of the dog (this assumes the provider is not actively involved in the placement process, for example if in an urgent care setting or other unrelated care).
● * Medical/mental health providers need to recognize that they play a role in the support system of a service dog team.

Industry/Program Related Issues

● “Any dog can be a service dog” messaging is misleading and may be harmful for owner trainers.

Handler Assessment: General Handler Assessment

● * Assessing a person for suitability as a handler is essential for ultimate team success but is challenging and relies on many variables.

Handler Assessment: Dog Welfare and Care

● Providing the dog with enough physical and mental stimulation along with sufficient downtime to relax and be off duty is important.

Handler Assessment: Readiness/Commitment

● A potential handler must be ready to commit to put in the time and effort it takes to make a service dog partnership work, including ongoing training and troubleshooting in addition to the care and attention the dog will require.

Handler Assessment: Handler Expectations

● Potential handlers need to be prepared for the amount of work a service dog requires and how different it is from having a pet.
● Potential handlers need to be prepared for the reality that a service dog may increase the visibility of their disability or change their disability presentation socially.
● Potential handlers need to be fully prepared for the challenges they may encounter as a handler such as access issues, unwanted attention, people staring and approaching.
● Potential handlers need to be prepared for setbacks and that both they and the dog will make mistakes. Being prepared to work through challenges with a return to foundational training is important.
Important Resources: Legal and Policy Resources

- Handlers need access to information on disability rights and advocacy services.

Important Resources: Program and Trainer Support

- Continued support from trainers/programs over the working life of the dog is important. While the amount of support needed by teams will vary, handlers need to be able to ask questions when concerns come up and have access to training support in person, via video, etc.

Team Formation: Initial Matching

- A good match takes into account many factors, including the dog’s personality, strengths, weaknesses, temperament, training, activity level, and natural talents paired with the potential handler’s strengths, weaknesses, task needs, activity level, lifestyle, home and work environments, support network (including family), and personality.

Team Formation: Building Relationship

- It is important that the team develops trust in each other and communicates well.
- Building a team bond is an active and ongoing process.
- It is most important for the handler to have trust in the dog (contrasted with the statement it is most important for the dog to have trust in the handler).

Team Formation: Confidence

- As the team becomes accustomed to each other, known tasks in familiar environments can build confidence.

Team Formation: Pace/Structure of Transfer Training

- Some type of one-on-one training element is important to catch failing/struggling team matches and provide the individual support necessary for confident teams.

Statements Endorsed by 80% Of Panel Members at a ‘Strongly Agree’ Level (34+12*):

**General Information**

- Getting a service dog is a major adjustment and comes with many responsibilities (care, training, maintenance) beyond having a pet, which handlers may not be prepared for.
- Service dogs should help make the handler’s life easier and improve the quality of life, but pressures on the dog and handler and negative experiences can take away from this focus.
- The bond between a handler and service dog is a symbiotic partnership. The dog is an extension of the handler reducing disability related barriers, and the handler provides stability for the dog.
- Handlers of owner trained dogs and program/organization trained dogs will have some different experiences and needs, particularly during the training phase.
Access Denials and Stigma

- Lack of education about service dogs in the general public can lead to access denials and judgmental comments.
- * Cultural biases may also contribute to access denials.

For Medical/Mental Health and Other Providers

- Providers need to understand that interacting with/distracting a service dog without the handler's permission is rude and can be harmful to the handler and the dog.
- Providers need to speak to handlers respectfully and treat them as individuals who will have their own boundaries regarding interactions with their service dog.
- Providers need to understand the role of service dogs and that psychiatric service dogs are not emotional support animals.
- It is important for both providers and handlers to have realistic expectations about service dogs. They are not instant cures, and while they can be a very helpful addition to other treatment they are not a substitute for continued care or use of other disability aids.
- Providers should understand the diverse and varied experiences and needs of people with disabilities and that service dogs are not all alike.
- Providers must have knowledge of service dog etiquette. They should not pet, talk to or distract the dog, ask intrusive questions, or question the necessity/legitimacy of the dog (this assumes the provider is not actively involved in the placement process, for example if in an urgent care setting or other unrelated care).
- Medical/mental health providers need to recognize that they play a role in the support system of a service dog team.
- Providers should seek education on how service dogs improve handler's quality of life and independence.
- It is particularly important that providers be knowledgeable about service dogs prior to recommending a service dog for a patient, as is typical with other treatment/medication options.
- More extensive education and availability of training is required for medical and mental health providers in order to satisfy the above recommendations (within this category).

Industry/Program Related Issues

- “Any dog can be a service dog” messaging is misleading and may be harmful for owner trainers.
- * Potential handlers should do their research before committing to a service dog program, and because of the complexity of the industry and issues around scams/unethically operating programs clear regulations or support for consumers/potential clients would be beneficial to prevent harm.
- * The tone of contact with and the culture of a program can have significant negative impacts on a client/handler if they feel the program is overbearing, that handlers are
always at fault for issues that arise, or if they feel that continued possession of the dog is threatened for minor mistakes.

**Handler Assessment: General Handler Assessment**

- *Assessing a person for suitability as a handler is essential for ultimate team success but is challenging and relies on many variables.*
- Love of dogs and the ability to connect with dogs is important, but is not enough to indicate a potential handler will be successful.
- *The likelihood the dog will be used by the potential client should be strongly considered.*

**Handler Assessment: Dog Welfare and Care**

- *Providing the dog with enough physical and mental stimulation along with sufficient downtime to relax and be off duty is important.*
- *Serious contraindications for the safety of the placed dog include any history of abuse of animals or other humans, anger management concerns, or a living environment that would be unsafe.*

**Handler Assessment: Readiness/Commitment**

- *A potential handler must be ready to commit to put in the time and effort it takes to make a service dog partnership work, including ongoing training and troubleshooting in addition to the care and attention the dog will require.*
- A potential handler must be ready and able to be responsive to the dog's cues.

**Handler Assessment: Handler Expectations**

- Potential handlers need to be prepared for the amount of work a service dog requires and how different it is from having a pet.
- Potential handlers need to be prepared for the reality that a service dog may increase the visibility of their disability or change their disability presentation socially.
- Potential handlers need to be fully prepared for the challenges they may encounter as a handler such as access issues, unwanted attention, people staring and approaching.
- Potential handlers need to be prepared for setbacks and that both they and the dog will make mistakes. Being prepared to work through challenges with a return to foundational training is important.

**Important Resources: Legal and Policy Resources**

- Handlers need access to information on disability rights and advocacy services.
- Current information on access laws and legal changes is important for handlers and should be provided through programs/trainers where applicable.

**Important Resources: Program and Trainer Support**

- Continued support from trainers/programs over the working life of the dog is important. While the amount of support needed by teams will vary, handlers need to be able to ask
questions when concerns come up and have access to training support in person, via video, etc.

Important Resources: Program and Trainer Support

- Non-traditional emergency plans involving neighbors, co-workers or others are suitable in the event of lack of family support.

Team Formation: Initial Matching

- A good match takes into account many factors, including the dog's personality, strengths, weaknesses, temperament, training, activity level, and natural talents paired with the potential handler's strengths, weaknesses, task needs, activity level, lifestyle, home and work environments, support network (including family), and personality.

  * The dog's performance of general obedience with multiple trainers in a public/high distraction setting, appropriate temperament, and ability to perform the tasks required by the handler (including working around relevant assistive equipment) is a basic requirement prior to team matching/formation.

  * Programs tend to know the history and temperament of the dog, but need to take more care in getting to know the personality and specific needs of the handler.

  * A good match takes into account many factors, including the dog's personality, strengths, weaknesses, temperament, training, activity level, and natural talents paired with the potential handler's strengths, weaknesses, task needs, activity level, lifestyle, home and work environments, support network (including family), and personality.

Team Formation: Building Relationship

- It is important that the team develops trust in each other and communicates well.

- Building a team bond is an active and ongoing process.

- It is most important for the handler to have trust in the dog (contrasted with the statement it is most important for the dog to have trust in the handler).

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- Building a team bond is an active and ongoing process.

Team Formation: Confidence

- As the team becomes accustomed to each other, known tasks in familiar environments can build confidence.

Team Formation: Pace/Structure of Transfer Training

- Some type of one-on-one training element is important to catch failing/struggling team matches and provide the individual support necessary for confident teams.

- It is important to identify teams that may need additional support and provide a clear process/dedicated contact for teams to get additional support, particularly for the first year with new handlers.
* Given how many topics that do not involve hands-on interaction with the dog may be taught to handlers (dog behavior, dog care, laws, general expectations) zoom or asynchronous video materials are useful tools for programs to consider implementing.

* It may be important due to disability concerns for programs not to have a one-size approach to transfer training: for example, an intensive over many days may not be physically or emotionally possible, and the repetition needed to build skill and confidence may take months or years of smaller doses of training, especially for new handlers.

Additional Statements Endorsed by 100% Of Panel Members at a ‘Strongly Agree’ Or ‘Moderately Agree’ Level Not Otherwise Included in Previous Lists, By Category.

Without duplication of the above lists, these additional statements were endorsed by 100% of the panel members when taking into account both “strong agreement” (no edits needed) and “moderate agreement” (could agree fully with minor edits).

**Access Denials and Stigma**

* Many people do not understand that service dogs are not pets but are working dogs essential to their handlers living independent lives.

* Certain types of handlers experience disproportionate bias due to their disability- for example psychiatric service dog handlers.

* The attention handlers experience in public is positive or can be seen as positive if the handler has reasonable expectations for public interactions.

* When family/friends are not supportive or exclude the handler due to their service dog it can cause rifts in the family and leave the handler isolated.

**For Medical/Mental Health and Other Providers**

* Providers need to understand and have training in trauma and disability issues, as well as an understanding of the impact of invisible disabilities.

**Industry/Program Related Issues**

* There are certain groups (such as those with multiple co-occurring conditions, dual-sensory impairments, and those with mental health concerns) who are currently underserved by the service dog industry.

* Programs assessing financial stability as part of determining whether to accept a potential handler as a client must take into account the financial barriers related to disability.

* A program requesting proof of assets or having a set income requirement well beyond general food, care, and regular vetting requirements is not an appropriate practice.

**Handler Assessment: Dog Welfare and Care**
Potential handlers should have the ability to independently care for a dog. If 100% independent care is not anticipated, there must be a plan for how they will get assistance caring for the dog at these times (family or an available support system, for example).

**Handler Assessment: Basic Handler Screening**

- A home visit and interviews with family members, close friends, or treatment team members in advance of acceptance into a program is advisable. This allows for more accurate knowledge and a chance to provide feedback to potential handlers who may not be ready to be matched with a service dog, but could improve their suitability through counseling, training, or other growth opportunities.
- A medical or mental health professional’s recommendation, assessment, or collaboration with the organization may be helpful in some situations.
- Individuals who have had time to adjust to their diagnosis and attempt other treatment are more likely to be aware of symptom presentation and needs a service dog could support, and have had an opportunity to demonstrate consistency/follow-through in their adjunctive care.
- Although not as commonly discussed, other disabilities may have their own specific prerequisites prior to placement with a service dog (for example, blood glucose management in diabetes or appropriate physical therapy for mobility concerns).
- It is important for a program/trainer to consider early on if a potential handler/client is capable physically, mentally, and emotionally of meeting the expectations of the training program, if accommodations can be made (such as individual instead of group training or additional contact hours), or if the client will not be able to be successful in the training approach the program/trainer can offer.

**Handler Assessment: Readiness/Commitment**

- A potential handler needs to be able to be in control of a dog at all times, and willing to put the dog's needs and safety first.
- A potential handler must have a consistent desire to manage their symptoms and health.

**Important Resources: Program and Trainer Support**

- A handler's needs changing may also result in early retirement of a service dog.
- Over the duration of a dog's working life, a handler's needs may change, requiring the training of new skills/tasks for the dog.
- A trainer/program in continued contact with a team may also notice warning signs of task training not being maintained or problematic behaviors developing that the handler is not yet aware of and be able to provide early intervention.
- Peer mentor programs are also valuable especially for new handlers

**Important Resources: Social Support**

- Support of local family or friends is important and can be necessary to provide care of the service dog in emergencies.
Important Resources: Financial Support

- * Support for required travel (such as for annual public access testing) is the handler's responsibility but should be something the handler is permitted to fundraise. For example, an organization should not disallow fundraising for travel costs in their contract.

Team Formation: Initial Matching

- * Signs of initial fit of dog and handler (dog not stressed by handler, general personality match) are important for later team bond and should be assessed with the dog and handler interacting before selection is finalized.
- * Matching should be done carefully with the input of more than one person.

Team Formation: Building Relationship

- * Early in the team's relationship, the dog and handler should get to know each other through games and playing and low stress activities.
- * It is important that the handler is the sole caretaker of the dog (in the first months following official placement or ongoing) and that all food, care, and the majority of interaction comes from the handler.

Team Formation: Confidence

- The handler must learn how to cue or lead tasks confidently and have a degree of comfort working in public places for successful transfer of the dog to the handler/client.
- * As much as possible, a program or trainer should practice similar outings to the handler's week to week life or expose the team to the actual daily environments they will encounter with trainer support.

Team Formation: Pace/Structure of Transfer Training

- * Initial training on topics like dog behavior, dog body language, and basic cues could be taught even before being matched with a dog, to allow for more focus on team bond and application after team selection and less cognitive load on handlers/clients trying to take in a lot of new information.

Definition

For the purposes of this study, 'service dog' has been used as a universal term for all types of assistance animals including guide, hearing, mobility, medical and psychiatric response dogs. This is due to the lack of common definition across settings/organizations/countries and some current challenges with the term 'assistance animal' being used for ESAs in higher education policy (with Higher Ed the likely audience in the short term).

However, because language is a challenge both within the community and in current research, panel members were asked to note the definition(s) they use:
1. A 'service dog' is any dog used for the purposes of disability support (i.e. 'service animal' in the ADA definition)
2. I use this definition, but I use 'assistance animal or assistance dog'
3. A service dog provides medical or psychiatric task work, while an assistance dog provides guide or hearing task work
4. A service dog provides any non-guide related task work, but I use the terms guide dog and service dog to define this difference
5. A service dog is what I call a dog meeting the definition in the ADA, but assistance dog includes a broader group of dogs such as therapy/facility dogs and possibly ESAs
6. An assistance dog is what I call dogs meeting the definition in the ADA, and service dogs are military or K9 units
7. I use some other definition or would like to add another definition I am aware of but do not use

In the 14 member panel,

● 10 members indicated they use definition 1
  ○ 6 indicated this was their only preferred definition
  ○ 1 also endorsed only 2
  ○ 1 also endorsed only 4
  ○ 1 also endorsed 2, 4 and 5
  ○ 1 also endorsed 2 and 6
    ■ All participants indicating multiple definitions endorsed definition 1
● 5 members indicated they use definition 2
  ○ 2 of these were the only preferred definition
● No members indicated they use definition 3
● 3 members indicated they use definition 4
  ○ 1 of these was the only preferred definition
● 1 member indicated they use definition 5, in combination with other definitions as stated above
● No members indicated they use definition 6
● 2 members provided additional definitions
  ○ 1 member added hearing dog as a definition in combination with other definitions
  ○ 1 member provided a preferred definition:
    ■ "An assistance dog is a guide dog, hearing dog, or service dog. A service dog is a dog for every other type of disability other than blindness/low vision or hearing difficulties."

Endorsement of Handler Experiences

One experience based statement that used the standard endorsement scale and was related to advocacy was endorsed by every panel member:

As a result of access challenges and lack of public knowledge, I personally have engaged in some form of advocacy or education work in my community

Strongly Agree 12
Moderately Agree 2
Minimally Agree 0
The remaining experience based questions focus on the frequency of handlers’ experience of situations addressed either in the endorsement statements themselves or in the narrative responses to the Round 2 survey. These questions were posed to all participants, so further analysis of these questions is needed in order to focus only on handler responses to increase the accuracy of reporting.

**I have experienced access challenges or negative interactions when working with my service dog in public.**

- Almost Always: 0
- Often: 2
- Sometimes: 7
- Almost Never: 2
- No Experience: 3

**I have experienced people interfering with or petting my service dog without permission.**

- Almost Always: 1
- Often: 4
- Sometimes: 4
- Almost Never: 2
- No Experience: 3

**I have experienced other harassment such as being photographed in public without my permission.**

- Almost Always: 0
- Often: 1
- Sometimes: 5
- Almost Never: 3
- No Experience: 5

**Due to access challenges I have personally experienced negative consequences such as not being invited out by friends following an incident.**

- Almost Always: 0
- Often: 0
- Sometimes: 0
- Almost Never: 4
- No Experience: 10
Due to access challenges or the anxiety of having an access challenge I sometimes "pick my battles" and avoid settings I have the legal right to enter.

Almost Always 0
Often 2
Sometimes 5
Almost Never 3
No Experience 4

I have personally had negative interactions with mental health or medical providers due to lack of knowledge or breach of service dog etiquette.

Almost Always 1
Often 0
Sometimes 6
Almost Never 2
No Experience 5

Facilitators and Barriers

This section was a rank order section. Items were generated from the Round 1 analysis, and then all additions indicated in Round 2 were added to the respective lists.

The order of importance for each list based on the panel response is below:

**Facilitators**

1. A handler who wants help and is ready for the responsibility
2. Commitment to the process and the relationship from the handler
3. A good basic match of needs/personalities and chemistry between the handler and the dog
4. Education upfront on what the service dog can do for the individual and reasonable expectations
5. Trust between team members and a supportive team bond
6. The skill and experience of the trainer/organization with the type of work needed
7. Handlers that are willing to learn and receive constructive feedback
8. A willingness to put the dog and the team’s needs first
9. A good match between handler and program or trainer for the training process and program requirements
10. Supportive follow-up communication and contact with the organization or trainer
11. A thorough and accurate assessment of potential handler success based on medical/mental health provider documentation
12. Ongoing primary treatment where applicable (mental health counseling, medical support, etc)
13. An understanding of the costs related to the dog/training and any follow up
14. A support structure local to the handler
15. Program/trainer transparency around policies and requirements and clear expectations for investment (financial and time)
16. Financial stability
17. Education in legal rights of teams and businesses plus legal options to navigate access denials
18. Annual assessment (such as a Public Access Test)

**Barriers**

1. Poor dog temperament or health
2. Unreasonable expectations of dog behavior (the dog must be perfect)
3. Poor team communication (not giving the dog breaks, not having good positive feedback)
4. A program/trainer that is not a good fit or is not operating ethically
5. Not using the service dog or not maintaining training
6. Lack of appropriate level of care (not meeting mental stimulation needs, not addressing health concerns, working an overweight or injured dog)
7. Unexpected changes such as those to a handler's personal life, loss of support people, or changes in financial stability
8. Fixating on mistakes
9. Significant trauma to the team, for example a dog attack
10. Others interfering with the team (strangers or family/supports)
11. Inability to advocate for self and team
12. Lack of education regarding service dogs in the general public
13. Lack of lifetime support from the trainer/organization, including emergency support (for program handlers)
14. Need for substantial retraining or "career change" for the dog, for example due to changing disability related needs

In both lists, the top 3 items (in bold) were very clearly most likely to be in an individual’s top 3 choices.

**Questions for Further Analysis**

There was a higher level of agreement among panel members than initially expected, and further analysis of the individual items is indicated to determine whether there are patterns based on member attributes (such as being a handler or not, or having mostly guide dog related experience vs other types of service dog experience).

Although there was a high level of agreement, consensus was not the goal of this panel. Because of this, items that represent contrasting opinions on policy and program elements discussed in the Round 2 responses were generated. These should also be further analyzed, and where applicable analyzed by attributes where disagreements exist. One example is the statements regarding a certification/ID where responses were polarized with some strong support and some strong opposition.
Another possibility identified early on was to capture items that were not highly endorsed but that might represent interesting outlier opinions or need for more research (for example something with low experience but high endorsement among those indicating experience).

Further analysis of the rank order results for facilitators and barriers may indicate future research questions in this area.

Because of the size and richness of the data set, further analysis can be conducted on the narrative responses post-dissertation to evaluate themes and constructs relevant to this research area as well as to identify interesting responses that warrant future research (e.g. descriptions of highly individualized experiences or knowledge in the narrative responses to Round 2 that were not directly represented in the panel statements).
## Appendix G: Full Endorsement Threshold Table

<table>
<thead>
<tr>
<th>General Information</th>
<th>Strong Agreement</th>
<th>Strong Agreement Adjusted for Experience</th>
<th>Moderate Agreement</th>
<th>Moderate Agreement Adjusted for Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handlers of owner trained dogs and program/organization trained dogs will have some different experiences and needs, particularly during the training phase.</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Needs for handlers of owner trained dogs and program/organization trained dogs may be different due to different types of support available, but their experiences as handlers in public post-training/placement will be similar.</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Service dogs should help make the handler's life easier and improve the quality of life, but pressures on the dog and handler and negative experiences can take away from this focus.</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Getting a service dog is a major adjustment and comes with many responsibilities (care, training, maintenance) beyond having a pet, which handlers may not be prepared for.</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>The bond between a handler and service dog is a symbiotic partnership. The dog is an extension of the handler reducing disability related barriers, and the handler provides stability for the dog.</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Access Denials and Lack of education about service dogs in the general public can lead to access denials and judgmental comments.</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Stigma</td>
<td>Access denials are sometimes rooted in business' experiences with fake dogs</td>
<td>X X</td>
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<td>X</td>
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<tr>
<td></td>
<td>Access denials are sometimes rooted in business' biased belief that service dogs are fake (not based on past experience or the current behavior of the dog in question)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Cultural biases may also contribute to access denials.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Certain types of handlers experience disproportionate bias due to their disability- for example psychiatric service dog handlers.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Certain industries such as the travel industry may present more challenges to handlers. For example, handlers may be more likely to encounter barriers such as being asked for documentation of some kind in renting a vacation home or hotel room than in other public access situations.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Many people do not understand that service dogs are not pets but are working dogs essential to their handlers living independent lives.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Service dogs are vital medical equipment.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Handlers often experience unwanted/negative attention in public.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>The attention handlers experience in public is positive or can be seen as positive if the handler has reasonable expectations for public interactions</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>It is the handler's responsibility to be ready and able to educate the general public and to self-advocate calmly and professionally as an ambassador.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>This expectation placed upon handlers who may not have the time, energy, or skills to self-advocate is unfair.</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Challenges with access and acceptance can be time consuming, emotionally draining, and embarrassing.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>When family/friends are not supportive or exclude the handler due to their</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
service dog it can cause rifts in the family and leave the handler isolated.

<table>
<thead>
<tr>
<th>For Medical/Mental Health and Other Providers</th>
<th>It is important for both providers and handlers to have realistic expectations about service dogs. They are not instant cures, and while they can be a very helpful addition to other treatment they are not a substitute for continued care or use of other disability aids.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X X X X X X X X X X</td>
</tr>
<tr>
<td>Providers need to understand the role of service dogs and that psychiatric service dogs are not emotional support animals.</td>
<td>x x x x x x x x x x</td>
</tr>
<tr>
<td>Providers should seek education on how service dogs improve handler's quality of life and independence.</td>
<td>x x x x x x x x x x</td>
</tr>
<tr>
<td>It is particularly important that providers be knowledgeable about service dogs prior to recommending a service dog for a patient, as is typical with other treatment/medication options.</td>
<td>x x x x x x x x x x</td>
</tr>
<tr>
<td>Providers need to understand and have training in trauma and disability issues, as well as an understanding of the impact of invisible disabilities.</td>
<td>x x x x x x x x x x</td>
</tr>
<tr>
<td>Providers should understand the diverse and varied experiences and needs of people with disabilities and that service dogs are not all alike.</td>
<td>x x x x x x x x x x</td>
</tr>
<tr>
<td>Providers need to speak to handlers respectfully and treat them as individuals who will have their own boundaries regarding interactions with their service dog.</td>
<td>x x x x x x x x x x</td>
</tr>
<tr>
<td>Providers must have knowledge of service dog etiquette. They should not pet, talk to or distract the dog, ask intrusive questions, or question the necessity/legitimacy of the dog (this assumes the provider is not actively involved in the placement process, for example if in an urgent care setting or other unrelated care).</td>
<td>x x x x x x x x x x</td>
</tr>
<tr>
<td>Providers need to understand that interacting with/distracting a service dog without the handler's permission is rude and can be harmful to the handler and the dog.</td>
<td>X</td>
</tr>
<tr>
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</tr>
<tr>
<td>When assessing the suitability of a potential handler, it would be ideal if a provider could have an honest conversation about whether the potential handler is able to take on the responsibility of a service dog and provide the care a service dog needs and fully outline the risks and benefits of a service dog as part of a treatment plan.</td>
<td></td>
</tr>
<tr>
<td>Providers need to be able to evaluate when someone might benefit from a service dog even when a disability is invisible, while also recognizing that if someone is not ready or not a good candidate for a service dog then the service dog may make the individual’s situation worse.</td>
<td></td>
</tr>
<tr>
<td>Providers do best when they work in conjunction with a service dog organization and are already educated or willing to learn.</td>
<td></td>
</tr>
<tr>
<td>Providers should trust the judgment of a trainer/program/organization and not conduct an evaluation.</td>
<td></td>
</tr>
<tr>
<td>Providers should trust the judgment of a patient/potential handler and not conduct an evaluation.</td>
<td></td>
</tr>
<tr>
<td>The question of the exact role a provider should play in evaluation and how much control they should have is complicated.</td>
<td></td>
</tr>
<tr>
<td>Medical/mental health providers need to recognize that they play a role in the support system of a service dog team.</td>
<td>X</td>
</tr>
<tr>
<td>More extensive education and availability of training is required for medical and mental health providers in order to satisfy the above recommendations.</td>
<td>X</td>
</tr>
<tr>
<td>Industry/Program Related Issues</td>
<td>Financial barriers to getting a service dog are an equity issue in the industry because marginalized groups may be disproportionately excluded from program involvement based on finances.</td>
</tr>
<tr>
<td>is overbearing, that handlers are always at fault for issues that arise, or if they feel that continued possession of the dog is threatened for minor mistakes.</td>
<td></td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td>Handlers may be used by some organizations as charity cases or mascots for fundraising purposes, or handlers who are more sympathetic cases for donors may have a better chance of being accepted into a program.</td>
<td></td>
</tr>
<tr>
<td>There are certain groups (such as those with multiple co-occurring conditions, dual-sensory impairments, and those with mental health concerns) who are currently under-served by the service dog industry.</td>
<td></td>
</tr>
<tr>
<td>Bias and ableism is a concern in the service dog industry (against specific disability types, due to lack of representation of disabilities being served in program/organization leadership, etc.)</td>
<td></td>
</tr>
<tr>
<td>The use of non-traditional breeds to stand out or as a marketing tool for a program may result in the placement of dogs that are not well bred or suited to service dog work, disappointing handlers.</td>
<td></td>
</tr>
<tr>
<td>“Any dog can be a service dog” messaging is misleading and may be harmful for owner trainers.</td>
<td></td>
</tr>
<tr>
<td><strong>Handler Assessment:</strong> <strong>General</strong></td>
<td></td>
</tr>
<tr>
<td>Assessing a person for suitability as a handler is essential for ultimate team success but is challenging and relies on many variables.</td>
<td></td>
</tr>
<tr>
<td>Overall suitability considerations and desirable factors for a potential handler will depend to some degree on the potential handler’s disability and the dog’s task work.</td>
<td></td>
</tr>
<tr>
<td>Love of dogs and the ability to connect with dogs is important, but is not enough to indicate a potential handler.</td>
<td></td>
</tr>
</tbody>
</table>
A primary consideration in screening is the potential handler/client's need for a service dog for independence not available through other treatment or assistive technology.

A service dog does not need to be the last option, but whether it is the best option remaining after other treatments have been attempted is a valuable question.

The likelihood the dog will be used by the potential client should be strongly considered.

<table>
<thead>
<tr>
<th>Handler Assessment: Dog Welfare and Care</th>
<th>Serious contraindications for the safety of the placed dog include any history of abuse of animals or other humans, anger management concerns, or a living environment that would be unsafe.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Any history of suicidality should be considered a contraindication for placement of a service dog.</td>
</tr>
<tr>
<td></td>
<td>Only acute and recent (for example hospitalized for an attempt in the past 6 months) suicidality should be considered as a contraindication.</td>
</tr>
<tr>
<td></td>
<td>Potential handlers should have the ability to independently care for a dog. If 100% independent care is not anticipated, there must be a plan for how they will get assistance caring for the dog at these times (family or an available support system, for example).</td>
</tr>
<tr>
<td></td>
<td>Potential handlers must have the financial stability to care for the dog.</td>
</tr>
<tr>
<td></td>
<td>Programs assessing financial stability as part of determining whether to accept a potential handler as a client must take into account the financial barriers related to disability.</td>
</tr>
<tr>
<td></td>
<td>A program requesting proof of assets or having a set income requirement well beyond general food, care, and</td>
</tr>
<tr>
<td>Handler Assessment: Basic Handler Screening</td>
<td>regular vetting requirements is not an appropriate practice.</td>
</tr>
<tr>
<td>-------------------------------------------</td>
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<tr>
<td></td>
<td>Providing the dog with enough physical and mental stimulation along with sufficient downtime to relax and be off duty is important.</td>
</tr>
</tbody>
</table>

|                     | X X X X X X X X X |

|                     | A home visit and interviews with family members, close friends, or treatment team members in advance of acceptance into a program is advisable. This allows for more accurate knowledge and a chance to provide feedback to potential handlers who may not be ready to be matched with a service dog, but could improve their suitability through counseling, training, or other growth opportunities. |

|                     | X X X X X X X |

|                     | Home visit requirements may present barriers to handlers who are estranged from family, for example due to trauma or abuse. |

|                     | |

|                     | A medical or mental health professional’s recommendation, assessment, or collaboration with the organization may be helpful in some situations. |

|                     | X X X X X X |

|                     | A medical or mental health professional should be required to provide documentation of disability. |

|                     | X X |

|                     | Requiring medical/mental health documentation as part of the assessment process of a trainer, program, or organization represents a barrier to potential handlers. |

|                     | |

|                     | Even for a person who would otherwise be a good candidate to work with a service dog, timing may not be right if there is an expectation of major family, job, or housing changes. |

|                     | |

|                     | Individuals who have had time to adjust to their diagnosis and attempt other treatment are more likely to be aware of symptom presentation and needs a service dog could support, and have had an opportunity to |

|                     | X X X |
| Handler Assessment: Readiness and Commitment | A potential handler must have a consistent desire to manage their symptoms and health. |
| It is important for potential handlers to be behaviorally stable, with a high level of self-care. |  |
| Independent handling is essential, and for individuals unable to handle a dog (mentally, physically, or due to age) another person needs to be identified to be the handler of the dog. | X |
| Assessment of the social supports a potential handler will have is very important. | X X X X |
| For potential guide dog handlers, established independence in orientation and mobility skills, including in unfamiliar settings, are essential before being considered for placement with a dog. | X |
| Although not as commonly discussed, other disabilities may have their own specific prerequisites prior to placement with a service dog (for example, blood glucose management in diabetes or appropriate physical therapy for mobility concerns). | X X X |
| It is important for a program/trainer to consider early on if a potential handler/client is capable physically, mentally, and emotionally of meeting the expectations of the training program, if accommodations can be made (such as individual instead of group training or additional contact hours), or if the client will not be able to be successful in the training approach the program/trainer can offer. | X X X X |
A potential handler must be ready and able to be responsive to the dog's cues. | X | X | X | X | X | X
---|---|---|---|---|---|---
A potential handler needs to be able to be in control of a dog at all times, and willing to put the dog's needs and safety first. | X | X | X | X | X | X
---|---|---|---|---|---|---
A potential handler must be ready to commit to put in the time and effort it takes to make a service dog partnership work, including ongoing training and troubleshooting in addition to the care and attention the dog will require. | X | X | X | X | X | X | X
---|---|---|---|---|---|---|---
**Handler Assessment:** Potential handlers need to be prepared for the amount of work a service dog requires and how different it is from having a pet. | X | X | X | X | X | X | X
---|---|---|---|---|---|---|---
**Handler Expectations** Potential handlers need to be fully prepared for the challenges they may encounter as a handler such as access issues, unwanted attention, people staring and approaching. | X | X | X | X | X | X | X
---|---|---|---|---|---|---|---
Potential handlers need to be prepared for the reality that a service dog may increase the visibility of their disability or change their disability presentation socially. | X | X | X | X | X | X | X
---|---|---|---|---|---|---|---
Potential handlers need to be prepared for setbacks and that both they and the dog will make mistakes. Being prepared to work through challenges with a return to foundational training is important. | X | X | X | X | X | X | X
---|---|---|---|---|---|---|---
**Important Resources: Legal and Policy** Current information on access laws and legal changes is important for handlers and should be provided through programs/trainers where applicable. | X | X | X | X | X | X | X
---|---|---|---|---|---|---|---
**Resources** Programs/organizations should provide access to legal support for clients encountering access challenges or seeking support in navigating change of housing/employment. | X | X | X | X | X | X | X
---|---|---|---|---|---|---|---
Service dog training programs/organizations should not provide legal services due to financial
<table>
<thead>
<tr>
<th>Constraint/Action</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handlers need access to information on disability rights and advocacy services.</td>
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<tr>
<td>A nationally recognized certification or ID process would decrease stress on service dog teams.</td>
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<tr>
<td>Such a certification would result in a reduction of fake service dogs.</td>
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<tr>
<td>Such a certification would help eliminate access challenges</td>
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</tr>
<tr>
<td>A Public Access Test would be a good starting requirement for such a nationally recognized certification/ID process</td>
<td>X</td>
<td>X</td>
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<tr>
<td>There could be serious issues with the fair and equitable implementation of any standardized identification program.</td>
<td>X</td>
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<tr>
<td>Focusing on education for the general public is more likely to eliminate challenges handlers face than attempting to implement a certification/ID program.</td>
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<td></td>
</tr>
</tbody>
</table>

**Important Resources: Program and Trainer**

- Over the duration of a dog's working life, a handler's needs may change, requiring the training of new skills/tasks for the dog. | X | X | X | X | X |
- A handler's needs changing may also result in early retirement of a service dog. | X | X | X | X | X |
- Continued support from trainers/programs over the working life of the dog is important. While the amount of support needed by teams will vary, handlers need to be able to ask questions when concerns come up and have access to training support in person, via video, etc. | X | X | X | X | X | X | X | X |
A trainer/program in continued contact with a team may also notice warning signs of task training not being maintained or problematic behaviors developing that the handler is not yet aware of and be able to provide early intervention.

When providing continued support, trainers/programs need to make sure that the methods do not appear overbearing or become stressful to the handler. One way to accomplish this is making sure that outside of continuing expectations such as scheduled testing handlers initiate follow-up contact.

Alumni engagement (through invitations to trainings/group outings, a newsletter, etc.) can be helpful in providing community.

Peer mentor programs are also valuable especially for new handlers

<table>
<thead>
<tr>
<th>Important Resources: Social Support</th>
<th>It is important for handlers to have service dog community (official interest groups, Facebook groups, etc.) for social support and to ask questions of peers with similar experiences.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Being a service dog handler can be isolating.</td>
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<td></td>
<td>Support of local family or friends is important and can be necessary to provide care of the service dog in emergencies.</td>
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<td>Non-traditional emergency plans involving neighbors, co-workers or others are suitable in the event of lack of family support.</td>
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<td>While family/friends are preferable in emergencies, if the dog is from a program/organization there should be an emergency support plan in place facilitated by the program/organization as backup</td>
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<tr>
<td>Important Resources: Financial Support</td>
<td>Service dog handlers need access to financial support (from programs or other sources) to assist with care needs, particularly the costs associated with vet care and illness/injuries. This facilitates equal access, social justice, and provides a safety net.</td>
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<tr>
<td>Programs/organizations should have an emergency vet fund to support handlers post-placement.</td>
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<tr>
<td>It is not feasible for programs/organizations to afford such an emergency vet fund.</td>
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<tr>
<td>Support for required travel (such as for annual public access testing) should be provided by the training program/organization.</td>
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<tr>
<td>Support for required travel (such as for annual public access testing) is the sole responsibility of the handler.</td>
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<tr>
<td>Support for required travel (such as for annual public access testing) is the handler's responsibility but should be something the handler is permitted to fundraise. For example, an organization should not disallow fundraising for travel costs in their contract.</td>
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<tr>
<td>Team Formation: Initial Matching</td>
<td>The dog's performance of general obedience with multiple trainers in a public/high distraction setting, appropriate temperament, and ability to perform the tasks required by the handler (including working around relevant assistive equipment) is a basic requirement prior to team matching/formation.</td>
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<td>Signs of initial fit of dog and handler (dog not stressed by handler, general personality match) are important for later team bond and should be assessed with the dog and handler interacting before selection is finalized.</td>
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<td>Matching should be done carefully with the input of more than one person.</td>
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</table>
Programs tend to know the history and temperament of the dog, but need to take more care in getting to know the personality and specific needs of the handler.

A good match takes into account many factors, including the dog's personality, strengths, weaknesses, temperament, training, activity level, and natural talents paired with the potential handler's strengths, weaknesses, task needs, activity level, lifestyle, home and work environments, support network (including family), and personality.

There may be outside factors, such as financial pressure, management priorities, donors with specific parameters, etc. that could lead to dogs being matched too early or without appropriate skill, to individuals who are not ready or may not excel as handlers.

<table>
<thead>
<tr>
<th>Team Formation: Building Relationship</th>
<th>Early in the team's relationship, the dog and handler should get to know each other through games and playing and low stress activities.</th>
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<tbody>
<tr>
<td></td>
<td>It is important that the team develops trust in each other and communicates well.</td>
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<td>It is most important for the handler to have trust in the dog.</td>
<td>X</td>
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<tr>
<td></td>
<td>It is most important for the dog to have trust in the handler.</td>
<td>X</td>
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<td>It is important that the handler is the sole caretaker of the dog (in the first months following official placement or ongoing) and that all food, care, and the majority of interaction comes from the handler.</td>
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<td>For handlers with families/children, or for dogs paired with minors it is important to find ways for the dog to be part of the family and bond with</td>
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other family members, while not disrupting training.

Building a team bond is an active and ongoing process.

Assuming a good initial match, a team bond should develop organically and does not need to be actively worked on.

While training might support bond, activities to build team bond must be evaluated/considered independently from other training and maintenance.

Team Formation: Confidence

As the team becomes accustomed to each other, known tasks in familiar environments can build confidence.

As much as possible, a program or trainer should practice similar outings to the handler's week to week life or expose the team to the actual daily environments they will encounter with trainer support.

The handler must learn how to cue or lead tasks confidently and have a degree of comfort working in public places for successful transfer of the dog to the handler/client.

Team Formation: Pace/Structure of Transfer Training

Initial training on topics like dog behavior, dog body language, and basic cues could be taught even before being matched with a dog, to allow for more focus on team bond and application after team selection and less cognitive load on handlers/clients trying to take in a lot of new information.

Given how many topics that do not involve hands-on interaction with the dog may be taught to handlers (dog behavior, dog care, laws, general expectations) zoom or asynchronous video materials are useful tools for programs to consider implementing.
It may be important due to disability concerns for programs not to have a one-size approach to transfer training: for example, an intensive over many days may not be physically or emotionally possible, and the repetition needed to build skill and confidence may take months or years of smaller doses of training, especially for new handlers.

It is essential that programs avoid a one-size-fits-all approach because they serve disability populations.

Providing an individual approach is often not feasible for organizations due to financial, staffing, or other constraints.

Some type of one-on-one training element is important to catch failing/struggling team matches and provide the individual support necessary for confident teams.

It is important to identify teams that may need additional support and provide a clear process/dedicated contact for teams to get additional support, particularly for the first year with new handlers.

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<th>26</th>
<th>46</th>
<th>34</th>
<th>62</th>
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<th>108</th>
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</thead>
</table>
VITA

K. Lynn Pierce
K.LynnPierce@gmail.com

Educational Background
PhD in Counselor Education, The Pennsylvania State University, University Park, PA May 2022
M.S. in Clinical Mental Health Counseling, Georgia State University, Atlanta, GA May 2018
Interspiritual Ordination, New Vision Interfaith Seminary, Elmsford, NY May 2015
B.A. in Music Composition and Theory, New World School of the Arts, Miami FL May 2012

Professional Honors, Awards, and Fellowships
Association for Counselor Education and Supervision Emerging Leader 2021-2022
Chi Sigma Iota Leadership Fellow 2020-2021
National Board of Certified Counselors Doctoral Minority Youth Fellow 2019-2020
National Board of Certified Counselors Minority Youth Fellow 2017-2018

Selected Teaching Experience
COU 532 Trauma Counseling, Kutztown University of Pennsylvania, Kutztown, PA Spring 2021
COU 562 Introduction to Addictions Kutztown University of Pennsylvania, Kutztown, PA Fall 2021
RHS 100 Disability Culture, The Pennsylvania State University, World Campus Spring 2021-2022

Selected Clinical Experience
The Pennsylvania State University, University Park, PA 2018-2022
- Herr Clinic: Individual Counselor, Supervisor
- Student Disability Resources: Disability Specialist Intern
Wellspring Counseling Center, Atlanta, GA 2017-2022
- Individual Counselor with focus on disability and queer populations
- Consultant for EMDR and Service Dog/ESA assessments

Selected Publications
Pierce, K. L. & Webb, A. Working effectively with clients experiencing chronic pain. (Submitted to the Journal of Counselor Preparation and Supervision in 2021)

Selected Presentations