Enabling people with disabilities to enjoy their full rights, live in dignity and take an active part in society are current EU priorities (Europe 2020; European Disability Strategy 2010-2020). The positive effects of assistance dog (AD) programmes for children with autism spectrum disorder (ASD) have generated considerable interest and enthusiasm from care givers and service providers (O’Haire, 2013; Berry et al., 2013). However there is a need for more rigor in the evidence base and greater clarity on the deployment of resources in this area. To this end, researchers in the recently formed Service Dogs Research Group (SDRG) at UCC are working within the newly formed Irish Assistance Dog Umbrella Group to strengthen understanding of the impacts of AD services on child and family functioning.

Ireland is at the forefront in the development of Assistance Dog (AD) Programmes. Launched in 2005 the Irish Guide Dogs for the Blind (IGDB) AD Programme for families of children with autism spectrum disorder (ASD) was the first of its kind in Europe. A surge in demand for ADs by families resulted in the establishment of three more charities, two of which are focused on ADs for ASD (Autism Assistance Dogs Ireland & My Canine Companion) and one which is focused on providing ADs for people with physical disabilities (Dogs for the Disabled). A fifth charity (Irish Therapy Dogs) concentrates on provision of therapy dogs for persons in residential care.

Our research to date with members of the Assistance Dogs of Ireland Umbrella Group has included an evaluation of parents’ perspectives of assistance dogs for families of children with ASD (Burgoyne et al., 2014). Developed on the basis of results from the first Service Dogs of Ireland Seminar (September 2014), we have just completed an Irish Research Council funded user led needs assessment of AD services that will impact the sector by delivering a toolkit to develop the research and service provision agenda. In addition we are currently seeking funding opportunities to do a complete economic evaluation to estimate the costs associated with AD services for children with ASD, the cost effectiveness of AD interventions and the cost per quality adjusted life year (QALY). We are working with the ‘Irish Assistance Dog’ umbrella group to address the gaps in research within the sector.
Definition of Terms
The domestic dog has been the primary focus of research in experimental and applied settings (Wells, 2007). The domestication of dogs, their ability to communicate and interact socially with humans has resulted in their being the popular choice of assistance animal. However horses, dolphins, guinea pigs and cats have also been utilized.

Currently, there are 188 service animal interventions registered with the standards body Assistance Dogs International (ADI). Assistance dogs include guide dogs for the vision impaired, hearing dogs for the hearing impaired, and assistance dogs for people with other disabilities, including autism spectrum disorder (ASD).

Animal-assisted interventions (AAI) are classified into three groupings: animal-assisted activities (AAA), animal-assisted therapies (AAT) and service animal programmes (SAP).

AAAs are delivered by trained personnel in environments such as hospitals and educational settings with an emphasis on quality-of-life enhancement via recreation and education, for example, therapy dogs trained to provide affection and comfort to patients in a nursing home or assist those on reading programmes.

AATs are practiced by professionals with individualised therapy goals. The emphasis is on improvements in physical, social and cognitive functioning, for example, an occupational therapist working to facilitate fine motor skill development in a child via a series of structured tasks such as grooming and feeding a dog.

SAPs use Assistance Dogs (ADs) to assist people with a disability in performing daily activities. Assistance Dogs live in house with the people they work with. Of late ADs have received growing attention as a means of aiding children with autism spectrum disorder (ASD) and other disabilities.

Companion dog describes a dog that provides companionship as a pet.

Assistance Dogs for Families of Children with ASD:
There is an emerging literature on the positive effects of assistance dog (AD) programmes for children with autism spectrum disorder (ASD). A recent systematic review of the literature on Animal Assisted Intervention for ASD has indicated preliminary ‘proof of concept’, but highlights the need for more rigorous research to establish a convincing evidence base (O’Haire, 2013). This view is upheld by another recent review pointing to the need for more rigorous research designs and larger sample sizes (Berry et al., 2013). Qualitative inquiry on the integration of ADs into ten families with a child who has ASD, showed that the presence of a dog can improve quality of life for children and parents (Burrows et al., 2008). A study examining risks and benefits of ADs using a series of structured interviews with 17 families, reported social and cognitive benefits in addition to physical and medical benefits (Davis et al., 2004). An experimental study which assessed the effects of ADs on basal salivary cortisol secretion of 42 children with ASD, demonstrated a reduction in the cortisol response and the
number of disruptive behavioural incidents post introduction of the dog (Viau et al., 2010). Assistance dogs complete a unique triad between parent/guardian and child. Typically the child is attached to the dog via a lead (leash) and belt. The dog walks with the child but takes commands from the parent (handler) (Burrows et al., 2008) If the child tries to step off a footpath or attempts to bolt, the dog will use all his/her power to slow the child down. ADs prohibit dangerous behaviour such as elopement (bolting) and provide a calming presence. Social, emotional and behavioural challenges at home and in public mean that parents/guardians of children with autism spectrum disorder (ASD) experience stress in most areas of their lives (Firth and Dryer, 2013; de Andres-Garcia et al., 2013; Hayes and Watson, 2013). In addition to behaviour such as elopement, public tantrums and the reaction from others are regarded as some of the more difficult aspects of caring for a child with ASD. Situations can leave parents/guardians feeling judged as ‘bad’ parents, or inadequate as perceived failures. Assistance dogs (ADs) can provide a unique support by facilitating child safety and promoting positive public reception. Outings to public places can become less stressful and families can enjoy greater freedom and mobility (Burgoyne et al., 2014).

Disability Assistance Dogs

There is emerging evidence on the benefits of Assistance Dogs (AD’s) for people who have ambulation and dexterity disabilities. According to the literature, ADs have positive effects on coordination, motor skills functioning, ambulation, dexterity and stability (Abbud et al., 2014; Munoz Lasa et al., 2011). The physical and psychosocial benefits of using AD’s during rehabilitation of clients with a physical disability has been previously documented (Abbud et al., 2014; Blanchet et al., 2013; Zsoldos et al., 2014). The use of an AD as a suitable gait aid optimizes physical functioning, facilitates ambulation and promotes independent mobility. The added psychosocial benefits of the AD include improvements on the patient’s self-image when using an AD compared to other walking aids, improved walking patterns, independent mobility, and facilitation of social and professional involvement (Abbud et al., 2014; Muñoz Lasa et al., 2015).

Parents Perceptions of Assistance Dogs for Families of Children with ASD

Our preliminary study was based in the primary care setting, within the context of a specific accredited AD Centre in Ireland. Our findings indicate that parents perceive AD interventions to be a valuable resources for families with children who have ASD. (Please see supplementary document Burgoyne et al., 2014 for a full report of this study).

Services User Needs Assessment (Supported by Irish Research Council 2014)

Study findings indicate that 1) whilst the need to protect children from environmental hazards outside the home is being met by AD services, there is a need to sustain child safety within the home, 2) there is a need for increased access to AD services and additional resources and 3) there is a role for technology in the development of AD services in Ireland. (Please see supplementary document O’Gorman et al., for a full report of this study)
References


