

# The Benefits of Guide Dog Ownership

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## Abstract

There is an apparent discrepancy between the actual number of guide dog owners and the proportion of visually impaired people who might benefit from a guide dog. This research aims to provide an understanding of the reasons why many visually impaired people have not applied for a guide dog, the range of benefits offered by guide dogs, and how these might vary amongst different populations and under different circumstances. While previous research describes a number of psychological and social benefits of assistant animal ownership, consistent with the companion animal literature, it also points to the importance of personal and social context on the impact and effectiveness of assistance animals.

The study described here involved a telephone survey of over 800 visually impaired people and found that independence, confidence, companionship, increased and changed social interaction, as well as increased mobility, are commonly-cited benefits of guide dog ownership. These psychological and social dimensions of owning a guide dog distinguish it from other mobility aids in its capacity to transform the lives of owners. However, as expected, demographic and contextual factors, such as gender, age, level of vision, and domestic circumstances, influence reasons for application and perceived benefits and drawbacks of guide dog ownership. The author argues that while this research has emphasised the tremendous impact a guide dog can have, providing the *most appropriate* mobility aid for an individual's circumstances is the hallmark of effective rehabilitation service provision. The article also suggests ways in which perceived barriers to applying for a guide dog might be reduced.

## Key words

Guide dogs, rehabilitation outcomes research, assistance animals

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## **Introduction**

Guide Dogs (formerly the Guide Dogs for the Blind Association) has been providing guide dogs in the UK since 1931. The organisation's mission is "to provide guide dogs, mobility and other rehabilitation services that meet the needs of blind and partially sighted people". At present, there are almost 5000 working guide dogs and the numbers are increasing each year. Yet, in 1997 the proportion of visually impaired people in the UK who made use of a guide dog represented just 1.3% of the registered blind and partially sighted population and 2.4% of the registered blind (Refson et al, 2000). This small proportion is unlikely to represent the total number of visually impaired people who could potentially benefit from a guide dog. Research commissioned by Guide Dogs in 1999 found that around over a fifth of visually impaired adults in the UK never go outside their home on their own because of their sight problems. For many of these individuals, a guide dog could offer the most appropriate means of achieving increased mobility and independence (Guide Dogs for the Blind Association, 1999). Furthermore, although guide dogs are trained principally to offer mobility assistance to visually impaired people, anecdotal evidence and limited research suggest guide dogs provide a range of other benefits, such as companionship, support and security. Yet many visually impaired people are not aware of the benefits of guide dogs or prefer not to use a guide dog, and instead rely on other means of improving their mobility. The research described here is rooted in concern over this apparent discrepancy between the actual number of guide dog owners and the proportion of visually impaired people who might benefit from a guide dog. It aims to provide an understanding of the reasons why many visually impaired people have not applied for a guide dog, the range of benefits offered by guide dogs, and how these might vary amongst different populations and under different circumstances.

## ***BENEFITS OF COMPANION ANIMALS***

The benefits of owning a companion animal, and particularly a dog, are now well-established. Studies of both pet ownership and animal-assisted therapy demonstrate a number of psychological, social and physiological benefits of companion and assistance animals.

Companionship is often the main motivation for acquiring a pet and the companionship and social support functions of companion and assistance animals offer well-documented psychological benefits (Hart, 2000; Endenburg, Hart & Bouw, 1994). A number of studies suggest that anxiety, depression and loneliness can be reduced by pet ownership or contact with an animal (Zasloff & Kidd, 1994; Folse et al, 1994; Gorczyca, Fine & Spain, 2000; Banks & Banks, 2002; Hart, 2000; Fine 2000). Siegel et al (1999), for example, found that owning a cat or dog significantly reduces the risk of depression among male AIDS patients. The benefit is especially pronounced when people are strongly attached to their pets and have few close friends. Crowley-Robinson, Fenwick and Blackshaw

(1996) have also found that depression, vigour and fatigue are reduced among nursing home patients when a dog is introduced.

Companion animals can approximate for, and even replace, human companionship and social support (Veevers, 1985), and are often seen as important family members, particularly where the dog is well-trained (Walton & McConocha, 1996; Albert & Bulcroft, 1987; Barker & Barker, 1988). Arguably, companion animals offer *more* than human support since, unlike most human relationships, they supply unconditional relationships (Archer, 1997) with little conflict (Hart, 2000). Lane, McNicholas and Collis (1988) summarise this effect:

“Many pet owners regard their pet as valued members of the family and may seek them out as a source of comfort at times of stress. The relationship can involve confiding and talking to the pet, a feeling of empathy and a sense of loving and being loved which can combat loneliness and depression, particularly in individuals who feel socially isolated. Pets can also meet an esteem function in providing a ‘need to be needed’. These aspects of pet ownership mirror elements of supportive human relationships that are believed to have important implications for health” (p.52).

There is even evidence to suggest that pets can mitigate stress in situations where, by contrast, the presence of a human best friend increases stress (Allen et al, 1991). However, there also exists evidence that pet ownership does not always substitute for other forms of social support (Friedmann et al, 1980) or contribute to reduced anxiety and depression (Garrity & Stallones, 1998) or changed psychological status (Friedmann et al, 1983).

Companion animals also stimulate and facilitate social interaction in a number of ways (Veevers, 1985): they attract attention, provide a source of entertainment, act as a topic of conversation (Hart, 2000; McNicholas, Collis & Morley, 1993), improve owners’ social confidence and relationship skills (Fine, 2000), make owners seem more appealing and act as status symbols (Gunter, 1999). This social lubrication effect may be more pronounced for dogs: Gerjes-Johnson and Kennedy (1995) found individuals are perceived as more likeable when accompanied by a dog than by another animal or by no animal.

In addition to the various psychological benefits of pet ownership, other direct and indirect health benefits have been recorded – particularly amongst dog owners. A number of studies identify pet ownership as a factor in improved recovery from illness (Friedmann et al, 1980; Friedmann & Thomas, 1995; Herrald, Tomaka & Medina, 2002) and in improved health in general. Serpell (1991), for example, found that acquiring a pet can lead to a significant reduction in minor health problems

and improved self-rated general health, and that this effect is more sustained among dog owners. Siegel (1990) found in a sample of over 1,000 participants that pet ownership moderates the impact of stressful life events resulting in fewer doctor contacts. Typically, such health benefits of pet ownership are mediated by social and psychological processes. By offering companionship, security and support, companion animals act to attenuate stress responses, resulting in cardiovascular benefits (Friedmann et al, 2003; Seigel, 1990; Dembicki & Anderson, 1996; Lago et al, 1989). Direct health effects in terms of lower blood pressure, heart rate and even cholesterol levels have been shown to result from stroking an animal (Anderson, Reid & Jennings, 1992). Furthermore, the health of dog owners is more likely to be directly affected by ownership due to increased exercise from regular walking.

It is important to add a caveat to these findings, which are, in essence, correlational. Pre-existing psychological or situational differences that impact on physical and psychosocial functioning may account for why people choose to own a pet (Sachs-Ericsson, Hansen & Fitzgerald, 2002). As Hart (2000, p.63) points out, “people who seek out animal companionship may be more skilled in making choices that maintain their own well-being”. Nevertheless, as Veevers (1985) concludes, “given their persistence in the face of serious disincentives [cost, time, responsibility etc.], we can only conclude that companion animals must do something which their owners believe to be beneficial. Moreover, those benefits must be believed to be substantial” (p.27).

### ***ASSISTANCE DOGS: PSYCHOLOGICAL, SOCIAL AND FUNCTIONAL OUTCOMES OF OWNERSHIP***

Recognition of the powerful bond between humans and companion animals and the well-documented benefits of animal ownership have led to the effective use of animals, and particularly dogs, in a therapeutic capacity for disabled and vulnerable people. For those with particular social and psychological needs, such as the elderly and individuals with mobility and/or sensory impairments, the benefits of a companion animal can be considerable (Friedmann, 2000). Mobility problems (which inevitably affect visually impaired people as well as other physically disabled people) can seriously restrict opportunities for social interaction, resulting in feelings of isolation or exclusion (Lane et al, 1998; McAlpine & Moore, 1995). Equally, disabled people often report lower levels of self-esteem and higher levels of depression than the general population (e.g., Kinney & Coyle, 1992), undoubtedly aggravated by the stigma attached to disability. Furthermore, visual impairment often occurs amongst the elderly – a group already more likely to have reduced social networks.

Consistent with the research reviewed above on the benefits of animal companionship, there is evidence that assistance dogs (i.e. guide dogs, hearing dogs, and dogs for the disabled) provide a range of functions –

practical, psychological, and social – which directly and indirectly improve the health and quality of life (in its broadest sense) of their users.

Findings from a study of 57 users of 'Dogs for the Disabled' suggest that important benefits of owning an assistance dog include increased social integration and psychological support (Lane et al, 1998). Almost all owners (92%) report that people frequently stop and talk with them while out with their dog; and three-quarters have made new friends since having their dog. Over a third feel they have a better social life – and that social interaction has often qualitatively changed, towards a less condescending and more respectful attitude. This seems to be due to a “shift in focus of attention away from the recipient’s disability toward their competence in handling a highly trained dog” (p.58). Owners also describe a supportive relationship with their dog. Most (93%) state that the dog is a valued family member, and 70% turn to the dog for comfort and feel the dog is *more* important as a friend than as a working dog. In addition, owners report an enhancement in perceived health. However, satisfaction and the quality of relationship with the dog is greater for those whose idea to get the dog was their own, compared to those influenced by others.

Valentine, Kiddoo and LaFleur’s (1993) small-scale, retrospective study similarly found that 90% of assistance dog owners feel less lonely, safer and more independent; while 80% feel more assertive, more content, have increased self-esteem, and experience more friendliness from strangers. Again, participants with mobility impairments rate the emotional benefits of service dog ownership as even more important than the practical benefits.

Studies conducted by Hart and others (Hart, Zasloff & Benfatto, 1996; Hart, Hart & Bergin, 1987; Mader, Hart & Bergin, 1989) highlight the social benefits to owners of assistance dogs. A small-scale, retrospective study of wheelchair users with service dogs (Hart et al, 1987) found owners report more social contact when accompanied by their dog than when the dog is not present and compared to a control group without dogs. Another study (Hart et al, 1996) found that, in addition to its primary function of alerting owners to sounds, the hearing dogs provide companionship and changed (and often improved) interactions within the family and the hearing community. The authors conclude: “assistance dogs appear to ameliorate the social awkwardness of the non-disabled individuals” (Hart et al, 1996, p.8; cf. Steffens & Bergler, 1998). This research indicates that service dogs could act to normalise social contacts for disabled children. However, while most service dog owners enjoy the increased social contact afforded to them by their dog, some owners feel ‘invisible’ since attention is typically directed towards their dog rather than them (Hart et al, 1987). Assistance dogs have also been shown to reduce the need for paid or unpaid carer assistance, thus reducing government support costs (Allen & Blascovich, 1996).

A number of studies have specifically examined the role of the guide dog and the benefits afforded to guide dog owners. Though only based on a sample of 7 guide dog owners, one study found advantages of guide dog use include increased confidence, reduced feelings of loneliness, and less

stressful and tiring mobility. In some cases, the dog is perceived to have a transformative role: “it changed my life completely” (Lloyd, Budge, La Grow & Stafford, 2000). A study of German guide dog owners (Steffens & Bergler, 1998) indicates that a guide dog offers increased independence in comparison to a sighted guide, and provides support that can mitigate stress factors associated with being visually impaired. Similarly, Miner’s (2001; also, Whitmarsh & Nzegwu, 2001) qualitative study of 8 US guide dog owners found owners benefit from increased confidence and independence. Sanders’ study (2000), although again based on a small sample, also highlights the changed self-definitions of guide dog owners. Owners’ sense of control and proficiency of dog handling was found to lead to increased confidence, independence and self-worth.

This previous research particularly highlights the social function of a guide dog. As suggested in studies of other assistance dogs, social interactions are not only increased but often changed when owners are accompanied by their guide dog (Miner, 2001; Sanders, 2000). Sanders (2000) describes how guide dog owners often find their social identity transformed to encompass their guide dog; this shared identity redefines owners as more competent while also making them more conspicuous. In some cases, however, this effect is not always positive, since there can be unwanted attention that distracts the dog (Lloyd et al, 2000). More often, however, guide dog owners report positive social interactions when accompanied by their dog (e.g., Guide Dogs for the Blind Association, 2001; Miner, 2001). The presence of a guide dog in social environments can have an effect on both owners and sighted people. One unpublished study (Muldoon, 2000) demonstrates that a guide dog can facilitate social interaction by encouraging sighted people to initiate conversation, and by improving owners’ social competence, reducing their feelings of isolation, insecurity and dependence within social situations. Guide dog owners can, conversely, feel self-conscious about using a long cane and experience a greater sense of isolation and lack of independence than when using a guide dog. The study therefore found that guide dog owners prefer to have their dog present in social situations, since the presence of the dog increases feelings of acceptance and participation amongst owners and works “as a catalyst for those [sighted] members of social groups who have little experience interacting with someone who has a vision impairment” (Muldoon, 2000, p.45).

## **CONTEXTUAL INFLUENCES ON OUTCOMES OF GUIDE DOG OWNERSHIP**

Studies comparing different mobility aids (Deshen & Deshen, 1989; Kay, 1980; Steffens & Bergler, 1998; cf. Whitmarsh & Nzegwu, 2001) highlight the different functions, advantages and disadvantages of guide dogs and other aids, such as long canes. For example, guide dog mobility tends to be considered more relaxing than long cane mobility, since the former involves obstacle avoidance and the latter obstacle detection. A guide dog also offers more advantages than long canes in unfamiliar

surroundings or on unknown routes (Steffens & Bergler, 1998). On the other hand, long canes do not require the care and domestic space of a guide dog (Miner, 2001). Other evidence suggests that guide dog owners are often treated differently – with greater regard – than white cane users; and that more guide dog owners than long cane users feel their quality of life has greatly improved since receipt of their respective mobility aids (Whitmarsh & Nzegwu, 2001). However, the loss of a guide dog with whom an emotional bond has been formed can impact severely on owners, to the extent that some can experience the same emotions as those following the loss of a close friend or relative (Nicholson, Kemp-Wheeler & Griffiths, 1995). Such considerations point to the importance of context in determining the appropriateness of different mobility aids.

Previous research similarly indicates that contextual factors influence the impact of companion and assistance animal ownership. “Variables such as socio-economic status, living alone and ability to continue to participate in customary activities contribute to the benefits individuals derive from their pets” (Friedmann, 2000, p.55; cf. Fritz et al, 1995; Ory & Goldberg, 1983; Albert & Bulcroft, 1987). In addition to demographic and situational factors, prior experience of pet ownership has been found to determine the impact of companion and assistance animals (Boldt & Dellmann-Jenkins, 1992). Crucially, the degree to which an emotional bond has been formed with the animal will influence whether an owner experiences health benefits (Boldt & Dellmann-Jenkins, 1992). This context dependence may explain discrepant results from studies of the beneficial impacts of companion and assistance animals (e.g., Sachs-Ericsson et al, 2002). Hart et al (1996) review a number of unpublished studies which present divergent results: two studies found improvements in psychological well-being and community integration while two did not. Robb and Stegman (1983) compared 26 pet-owners with 30 non-owners (all respondents, except one, were male) and found no differences in health-related variables. They conclude that other research which identifies a relationship between companion animals and human health may depend on contextual and individual characteristics of respondents, such as gender. Likewise, Garrity and Stallones (1998) have reviewed 25 studies of pet ownership and conclude: “the benefits of pet association are apparent only in certain situations and under certain circumstances” (p.19).

Accordingly, some groups, such as older people and those living alone, are more likely to benefit from companion animals. As with other groups, older pet owners have been found to experience relaxation, reduced loneliness, a sense of purpose and self-worth, and improved morale, particularly when they feel a strong sense of attachment to an animal (e.g., Boldt & Dellmann-Jenkins, 1992; Struckus, 1991; Enders-Slegers, 2000). However, the emotional support and social facilitation roles of companion animals may become much more significant for groups at risk of social isolation or with reduced social networks, such as the elderly (Lane et al, 1998). As Rogers & Hart (1993) point out, “pets may serve to buffer and normalise an ageing person's sense of social isolation” (p.265)

and provide support through bereavement of loved ones (Baun & McCabe, 2000; Garrity et al, 1989; Enders-Slegers, 2000). Since the UK population is ageing, with many living alone (71% of women and 42% of men aged 85 and over) (Office for National Statistics, 2004), these particular benefits of companion animal ownership are increasingly salient.

The research reviewed so far demonstrates that certain populations can particularly benefit from animal ownership and that some animals (e.g., dogs) can offer unique health benefits. Yet there are other considerations relating to personal circumstances, which may limit the benefits of ownership (or prohibit ownership altogether) of certain types of animal. Different animals can trigger allergies or asthma and make different demands on finances, housing choice/ space, mobility and lifestyle (Baun & McCabe, 2000; Miner, 2001). In the case of assistance animals, there can also be psychological prerequisites to applying. As Hart et al (1996, p.13) point out “the decision to acquire a hearing dog requires the strength and self-acceptance to publicly acknowledge hearing loss”. The same point is made by Lambert (1990) in relation to choosing a guide dog. Evidently, uniform response to assistance animals should not be assumed. Responses to animals are a “highly individual matter, depending on the person’s previous life experiences with animals, the person’s current health and responsibilities, and the species and breeds of animals... one size does not fit all” (Hart, 2000, p.74-5; cf. Duncan & Allen, 2000; Koda & Shimoju, 1999). The methodological implication is that sub-group stratification is important in analysing the benefits of animal ownership.

The physical, cultural and legal context in which assistance dogs are employed also affects the impact they have on their owners. Whilst a guide dog offers unique (psycho-social) benefits not afforded by other mobility aids, there are occasions when other mobility aids may be more appropriate than a guide dog. *Practical* considerations - such as the presence of a sighted guide; the physical layout of surroundings; facilities or opportunities for a dog to rest, drink or spend - constrain the appropriateness and utility of a guide dog in any particular environment or social situation (Muldoon, 2000). However, research has also demonstrated that there are times when using a guide dog may not be *socially or culturally* appropriate because it attracts too much attention (if the user wishes to retain a low profile), or because the dog may *not* be accepted within a social situation as readily as other mobility aids, for example at restaurants or amongst friends who dislike or fear dogs (Muldoon, 2000; Valentine et al, 1993; Deshen & Deshen, 1989). Effectively these findings demonstrate that the use of a guide dog as a mobility aid affords both benefits and disadvantages that are grounded in social beliefs about the role and acceptability of animals, just as social beliefs about disability affect the way in which visually impaired people are treated (e.g., with fear and stigma). Although acknowledgement of the benefits of animal companionship is deeply embedded in our society’s belief system (Beck, 2000), the introduction of recent disability legislation (e.g., the Private Hire Vehicles [Carriage of Guide Dogs etc.] Act 2002)



prohibiting discrimination by service providers against guide dog owners is likely to highlight the vital role played by assistance animals in the lives of disabled people.

With the diversity of physical, social and cultural environments and of psychological needs and resources, the guide dog offers one option for aiding mobility or rehabilitation, more appropriate in certain contexts than in others. Evidence of the range of functions performed by guide dogs should therefore be considered alongside contextual constraints and enablers.

## **Rationale and Aims of Current Study**

As discussed earlier, it is likely that there are a significant number of visually impaired people who do not own a guide dog but could potentially benefit from owning one. This research examines the role of a guide dog, including benefits and drawbacks of ownership, as perceived by actual and potential users of guide dogs. In light of existing evidence of the importance of context on the impact and effectiveness of companion/assistance animals and of different mobility aids, this research provides an understanding of which populations are likely to benefit most from a guide dog, under what circumstances and in what ways.

Extending previous studies of assistance dog ownership, which have generally been based on a limited number of cases (e.g., Valentine et al, 1993), this study involves a sample of over 800 visually impaired people. In addition, the existence of divergent findings within the literature regarding the psychosocial impact of assistance dogs warrants investigation in terms of the context in which benefits are realised (e.g., Baun & McCabe, 2000; Hart et al, 1996). Other authors (e.g., Fine, 2000) point out that the paucity of evaluation research of animal-assisted therapy continues to throw doubt over the efficacy of this approach. These points highlight the importance of continuing research in this area.

## **Subjects and Methods**

The results reported here describe findings from a major telephone survey conducted during 2003 with visually impaired adults in the UK, including guide dog owners and non-guide dog owners. Participants were recruited from Guide Dogs' database of guide dog owners and via UK voluntary associations for blind and partially sighted people willing to support the survey. In order to comply with Data Protection regulations, these voluntary organisations forwarded information about the survey to visually impaired people on their databases and asked those willing to participate to forward their contact details to Guide Dogs (in prepaid envelopes or via a freephone number). Guide dog owners were contacted directly and asked to opt in to the survey.

Approximately the first 400 of each population group who gave their consent were contacted for an interview. As consent had already been obtained prior to the telephone call, interviewers encountered little reluctance by the population to being interviewed. The interviews were conducted by a research agency commissioned by Guide Dogs. The questionnaire for the telephone interviews<sup>1</sup> was based on data gathered from six earlier focus groups held in four locations around the UK with a total of 29 visually impaired people (results from the qualitative stage are reported in Nzegwu & Whitmarsh, 2003), and comprised quantitative and qualitative questions. This allowed respondents, in most cases, to describe their views and experiences in their own words (after which, responses were coded), thus minimising the influence of investigators and increasing the validity of the data (Robson, 1993).

## Results

A total of 831 visually impaired people (404 guide dog owners and 427 non-guide dog owners) were interviewed. As illustrated in *Table 1*, the survey suggests that the demographic profiles of the two groups are different in a number of significant ways. Guide dog owners are typically younger<sup>2</sup>, more likely to be educated to degree level and to be in paid employment than non-owners, who are more likely to live alone, to have additional disabilities and some residual vision.

### ***Perceptions of guide dog ownership amongst non-owners***

#### **Awareness of Guide Dogs**

The findings suggest widespread awareness, in the main, of the Association. Guide dog owners were often already aware of Guide Dogs (27%) prior to applying for services, though the suggestion to apply could also come through other people, most often friends and family (for 25% of men, and 18% of women) or a social worker (for 16% of men and 20% of women). In some cases, a doctor/ nurse (9%) or member of Guide Dogs' staff (7%) made the suggestion. The suggestion was more likely to have come from a doctor/ nurse (12%) or friend (14%) for those guide dog owners of retirement age.

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<sup>1</sup> The telephone interview lasted around 20-25 minutes, although this included questions on other research topics of interest to Guide Dogs. Respondents were asked up to 17 questions on the topic of guide dog ownership, and 12 demographic questions.

<sup>2</sup> Due to an oversight, age was not recorded within the survey. Therefore, employment status (the proportion retired) is used as a proxy indicator for respondents' age.

Table 1. Demographic profile of survey respondents

Respondent characteristics		Guide dog owners		Non-guide dog owners	
		N	% of group	N	% of group
Gender	Male	203	50.2	173	40.5
	Female	201	49.8	254	59.5
Additional disabilities/ serious health problems	Yes	213	52.7	273	63.9
	No	191	47.3	154	36.1
Registration status	Registered blind	386	95.5	236	55.3
	Registered partially-sighted	17	4.2	171	40
	Not registered	0	0	13	3
	Don't know	1	0.2	7	1.6
Residual vision	Yes	235	58.1	369	86.4
	No	169	41.9	58	13.6
Employment status	Paid full-time employment	26	6.5	11	2.6
	Paid part-time employment	14	3.5	7	1.7
	Volunteer/ unpaid	11	2.7	5	1.2
	Self-employed	15	3.7	6	1.4
	Full-time student	8	2	3	0.7
	Retired	207	51.2	343	80.3
	Unemployed/ looking for work	27	6.7	11	2.6
	Unable to work	74	18.3	34	8
Qualifications obtained	Looking after the home	22	5.5	7	1.7
	GCSE/ O-Level	165	81.7	104	74.5
	GNVQ	26	12.9	12	8.5
	BTEC	14	6.9	16	11.3
	A-Level	85	42.1	49	34.8
	First degree	77	38.1	46	32.6
Living arrangements	Postgraduate degree	28	13.9	29	20.6
	Live alone	131	32.4	160	37.5
	Live with one or more others	273	67.6	267	62.5
National origin	White	395	98.8	419	98.6
	All other categories	9	2.2	8	1.9
<b>Total</b>		<b>404</b>	<b>100%</b>	<b>427</b>	<b>100%</b>

The vast majority (93%) of interviewees who are *not* guide dog owners had also heard of Guide Dogs prior to this survey, suggesting widespread awareness of the Association amongst the visually impaired. Awareness of the Association seems to be higher amongst younger visually impaired people: of the 30 non-owners (7% of this group) who had not heard of Guide Dogs prior to the survey, all but one respondent is retired. It is important to bear in mind that the sample for this survey included very few people from national minority groups (1.6%) or people who are not registered blind or partially sighted (1.6%). Other, unpublished Guide Dogs research (Madge & Nzegwu, 2003) has shown that awareness of the organisation amongst national minority populations tends to be much lower.

## **Expectations of the role of a guide dog**

In order to ascertain visually impaired people's expectations of guide dog ownership, the survey asked owners why they had initially applied for a guide dog and non-owners how they thought a guide dog might be able to help someone with a sight loss. The findings suggest there is a good understanding amongst 'potential' guide dog owners of what to expect from a guide dog.

- **Mobility, independence and confidence**

Current guide dog owners had initially applied for a guide dog because they wanted help with getting around (i.e. mobility; 75%) or more independence (30% of men and 41% of women; 39% of retirees and 31% of working age). Over one in ten owners had applied for a guide dog to increase their confidence (10% of men and retirees; and 13% of women and those of working age). Twice as many owners with residual vision than without (15% versus 7%) applied for this reason. The desire to get more exercise and go for more walks was a reason for applying for some owners, particularly retirees (8%, versus 6% of those of working age). Some (3%) also mentioned their dissatisfaction with using a white cane as a motivation for applying.

Of the non-owners interviewed, most (74% of men and 63% of women) recognised that a guide dog can help with mobility, and some (25% of men and 27% of women) that it can offer increased independence and confidence (26% of men and 17% of women; 29% of those of working age and 19% of retirees). A few (9% of men, 6% of women) also identified the role of a guide dog in enabling the owner to get more exercise or walk more.

- **Companionship, security and socialising**

There is evidently a considerable awareness amongst the visually impaired of the *broader role* of a guide dog beyond its mobility function. Almost a quarter of non-owners (20% of men, 24% of women) cited companionship as one of the functions of a guide dog. However, only 5% of guide dog owners stated companionship as a reason for applying for a guide dog.

In addition, of those who currently own a guide dog, 5% of women and retirees and 3% of men and those of working age had applied for reasons of security; 6% of non-owners cited this as a potential function of a guide dog. Three per cent of owners, particularly those of working age (4%, versus 2% of retirees) stated they had originally applied for a guide dog to facilitate socialisation or meet new people. This compares to a higher 8% (rising to 10% of those of working age) of non-owners who perceive this to be a potential function of a guide dog.

- **Lack of awareness of the role of a guide dog**

Although most non-owners interviewed are aware of the benefits of a guide dog, more than one in eight (10% of men and 15% of women; 14% of retirees and 8% of those of working age) stated that they do not know

how a guide dog could help a visually impaired person; and a few people (5% of men, 8% of women) mistakenly believe a guide dog could perform other tasks, such as picking up post or bringing the phone.

### **Reasons for not applying for a guide dog**

The vast majority of non-owners (89%, rising to 92% of those with residual vision, females and retirees) had never applied for a guide dog, and the reasons for this were elicited. In addition, guide dog owners were asked if there had been anything that had put them off initially applying for a guide dog. Over a third of guide dog owners surveyed (38% of women and 31% of men; 25% of those retired and 45% of working age) indicated that there had been something that had initially put them off. (The percentages quoted below for current owners relate to the proportion of this group which indicated that they had initially been put off applying, rather than the whole sample of owners.)

### **Informational barriers**

Although most non-owners have a good understanding of the role of a guide dog, a number of misperceptions relating to eligibility criteria emerged from the survey, in particular the belief that you need to be totally blind to qualify for a guide dog. This belief was the most common reason for non-owners not applying for a guide dog (40%, rising to 44% of men and those of working age), and the reason why the highest proportion (17%) of current owners had initially been put off applying. Other misperceptions about eligibility included age limits (7% of non-owners, 2% of those current owners), non-eligibility of those with multiple disabilities (6% of non-owners, 1% of current owners) and cost of ownership, including buying the dog and on-going veterinary bills (1% of non-owners, 4% of current owners). These misperceptions, in combination with the one in eight non-owners who stated that they do not know how a guide dog can assist a visually impaired person, highlight the informational barriers that exist in applying for a guide dog.

### **Social and environmental factors**

Personal, work or domestic circumstances, including owning other pets (7%), having to go away from the family to train (4%), relative's/ spouse's views (4%), having young children (2%), poor health (1%), perceived inappropriate facilities for a dog (1%) and work situation (1%) had also put current owners off initially applying for a guide dog. Up to 8% of non-owners similarly stated they have not applied for a guide dog because they believe their accommodation is inappropriate for a dog, or they would not be allowed a dog where they live. For 2% of non-owners, owning other pets is a reason for not applying.

### **Psychological factors**

Psychological barriers, such as the stigma attached to owning a guide dog (9% of current owners, 1% of non-owners), unwillingness to accept blindness, a lack of confidence - for example to go out alone, to undergo the training (4% of owners) - also prevent some potential owners from applying.

Other psychological reasons for not owning a dog relate more to personal preferences and priorities. A common reason that non-owners give for not applying for a guide dog is the considerable responsibility involved in caring for the dog (16%), as well as the inconvenience of animal ownership (5% of men, 2% of women). Similarly, a significant proportion of owners were initially put off applying because of the responsibility involved (14%), because they did not have experience in looking after an animal (2%), or because of the inconvenience of owning a dog (3%). Dislike or fear of dogs also dissuades some (4% of non-owners, 7% of current owners) from applying for a guide dog.

### **No perceived need for a guide dog (at present)**

Almost a quarter of non-owners (23%) simply feel they do not have a need for a guide dog at the moment, and a few remarked that they would not want to deprive those with a greater need. A few current owners (5%) also felt initially that they did not need a guide dog, and this had put them off applying. Nevertheless, almost four in ten non-owners (45% of men, 35% of women; 58% of those of working age and 35% of retirees) would consider applying for a guide dog in the future - presumably because they recognise the benefits of owning a guide dog (see above). A further one in ten (11%, rising to 15% of those of working age) stated they do not know whether they would consider applying in future. Those with residual vision feel they are more likely to apply for a guide dog in the future than are those without residual vision (41%, versus 26%).

### ***Perceptions of guide dog ownership amongst current owners***

The previous section examined perceptions of guide dog ownership amongst visually impaired people who do not own a guide dog, and the retrospective perceptions of current owners prior to ownership. The survey also examined owners' present understanding of the role of a guide dog, as informed by their experiences of ownership. Owners' perceptions of the benefits of ownership are shown in *Figure 1*.

### **Increased mobility and independence**

The majority (81%) of owners feel that their mobility has improved with their guide dog, and over half (54% of men and 62% of women) state that they benefit from increased independence through owning a guide dog. Up to 8% of those of working age, rising to 18% of retirees, feel going for walks and getting exercise is a benefit of having a guide dog.

### **Social and psychological benefits**

A significant proportion of owners also mentioned social or psychological benefits of guide dog ownership. This includes increased confidence (22% of men and 31% of women; 23% of retirees and 30% of those of working age), companionship (28%, rising to 30% of those of working age) and socialising (14%, rising to 16% of those of working age). Up to one in

ten (6% of men and 10% of women) feel security is a benefit of owning a guide dog. Those living alone are more likely than those living with someone to cite companionship with the dog as a benefit of ownership (36% versus 22%); and those with residual vision are more likely than those without to consider increased confidence (33% versus 18%), socialising (16% versus 11%) and security (10% versus 5%) as benefits of owning a guide dog.

[Insert Figure 1 here]

The way in which guide dog owners are treated by others is also considered a significant benefit: one in five owners (21%, rising to 25% of those of working age) feel other people are more friendly towards them, and nearly one in ten (5% of men and 12% of women; 7% of retirees and 11% of those of working age) consider they are offered more help when accompanied by their dog.

When the initial reasons for applying for a dog are compared with perceived benefits of ownership, it is clear that expectations seem to have been largely met. For example, 90% of those who stated improved mobility is a benefit of owning a guide dog had applied in order to get help with mobility. Clearly, though, *additional* benefits, particularly in terms of companionship and social contact, are realised (or acknowledged) once they own the guide dog.

Half of those owners interviewed (51%, rising to 59% of those of working age) admit that there are *drawbacks* to owning a guide dog. These include:

### **Responsibility or inconvenience of owning a dog**

Almost a third of this group (33% of men and 26% of women; 34% of retirees and 26% of those of working age) claimed to find the responsibility involved in caring for the dog something of a drawback. A number of specific drawbacks relating to the inconvenience of dog ownership were also raised, including dog hairs (8%) and problems associated with cleaning up after the dog (5%). One in twelve (8%) also mentioned that going away on holiday is difficult to arrange when you own a guide dog. A further third (28% of men and 33% of women; 25% of retirees and 35% of those of working age) of those identifying drawbacks to owning a guide dog pointed out that there are places where it is not possible or convenient to take the dog.

The survey specifically addressed whether owners had difficulty in taking their dog to GP surgeries and hospitals. Only 3% of men and 6% of women (3% of retirees and 7% of those of working age) have been refused or discouraged from bringing their guide dog to their GP surgery. Whilst most owners were accompanied by their guide dogs when they went for their last outpatient appointment (68%) or while visiting someone else in hospital (94%), far fewer (24%, rising to 29% of those of working age) brought their dog with them as inpatients. Of those attending hospital on their own behalf (as either inpatients or outpatients), some (11%) did not bring their guide dog because they were unsure if they would be allowed to bring the dog with them, while more often (36% of men, 26% of women) owners had *preferred* not to bring their dog with them, and found sighted guide more convenient or practical under the circumstances. Of those visiting someone else in hospital, the majority (91%) felt comfortable bringing their dog.

### **Unwanted attention from people**

Seven per cent (5% of retirees and 9% of those of working age; 6% of men and 8% of women) cited unwanted attention from people while out with the dog as a drawback of ownership.

### **Grief or loss when the dog retires, gets ill or dies**

Finally, 5% consider the loss or grief when the dog retires, gets ill or dies as a drawback to ownership.

## **Discussion**

### ***The role of a guide dog – benefits and drawbacks of ownership***

This research has provided a greater understanding of the way in which visually impaired people – including both actual and potential guide dog owners – understand the role and function of a guide dog. Although the most commonly-cited benefit of owning a guide dog is increased mobility, a significant number of visually impaired people cite independence,



confidence, companionship, socialising and (to a lesser extent) security, as benefits of ownership. Some owners also feel that they are treated differently when with their guide dog – people tend to be friendlier and offer more help. These findings are consistent with the vast majority of the research on guide dog ownership reviewed earlier (e.g., Zee, 1983; Steffens & Bergler, 1998), although contrary to Lane et al's (1998) findings, improved physical health was not voluntarily identified as a benefit of ownership in this study. Guide dog owners experience psychological and social benefits that have previously been reported by companion dog owners within the general population; in fact, the benefits of ownership are likely to be *more* pronounced for guide dog owners as a group with often greater social and psychological needs and for whom a stronger bond is likely to develop with their dog (Nicholson et al, 1995). It is interesting to note that a higher proportion of non-owners in this study expect a guide dog to offer psycho-social functions in addition to mobility and independence than did owners when they applied. This seems to reflect a widespread awareness amongst society of the well-documented benefits of pet ownership and a possible reluctance amongst owners to admit that these motivated their application, since a guide dog is trained at considerable expense to provide mobility assistance, rather than simply being a pet.

Although the aim of this survey was not to make a direct comparison of guide dogs and other mobility aids, the advantages of a guide dog over a white cane are implicitly recognised by owners in their responses. The comparison was often explicitly made by owners who took part in the preliminary focus groups (Nzegwu & Whitmarsh, 2003). A guide dog was considered superior to a white cane not only as a mobility aid (in the words of one owner: “a Rolls Royce compared to a Lada”), but also as a means of empowering, commanding respect and raising the *status* of a visually impaired person. These psychological and social dimensions of owning a guide dog distinguish it from other mobility aids in its capacity to transform the lives of owners. As noted elsewhere (Allen & Blascovich, 1996), while technological aids are rapidly advancing to meet the physical needs of disabled people, social and psychological needs are of at least equal importance and not adequately met by technology alone.

Conversely, a guide dog is understood by visually impaired people to have certain limitations and drawbacks, which other 'mobility aids' (such as a white cane) implicitly do not suffer from. These include the responsibility involved in caring for a dog, places where it is not possible or convenient to take a dog (each mentioned by almost a third of owners) and (to a lesser extent) the inconvenience of not being able to go away on holiday, dog hairs and cleaning up after the dog. This reminds us that a guide dog will be more appropriate in certain situations and for individuals with particular preferences, while other mobility aids can still offer certain advantages.

Despite the various reasons cited by non-owners for not applying for a guide dog, this survey suggests a widespread awareness of the benefits

to owning a guide dog and the large potential guide dog user population. Although some non-owners feel they currently do not need a guide dog, four in ten would consider applying for one in the future. Yet the survey also found that potential guide dog owners are faced with a number of perceived barriers - informational, psychological, social and environmental - to applying for a guide dog. Nevertheless, that many current owners initially perceived the same barriers to applying would suggest that they can be overcome. Informational barriers (and to some extent social barriers) can be overcome by raising awareness, for example about eligibility criteria for guide dog ownership and the full range of benefits of ownership. Where psychological barriers (e.g., non-acceptance of blindness, lack of confidence, reservations about owning a dog) exist, these need to be identified and addressed before the idea of applying for a guide dog becomes acceptable. Of course, in some cases, it is important to recognise that the reasons given for non-ownership relate to genuine preferences, rather than barriers to be removed. Yet for those visually impaired people who could benefit from a guide dog but do not currently own one, this research suggests that there are ways in which information about, and access to, services can be improved.

### ***Contextual influences on awareness, perceptions and decision-making processes***

One of the aims of this research was to examine how contextual factors influence visually impaired people's understanding of the role of a guide dog. Firstly, awareness of the role of a guide dog – while generally high – is lower amongst women and older people. We know from this survey that women and older guide dog owners are more likely to receive information about Guide Dogs' services from social and health care providers and through informal social networks. Information about Guide Dogs' services should thus be targeted at these under-informed groups, utilising the channels of influence and information available to them.

Closely related to this point, demographic and contextual factors, such as gender, age, level of vision, and domestic circumstances, influence expectations and reasons for applying for a guide dog. This survey found that men, younger people and those with residual vision are more likely to consider applying for a guide dog in the future. Social context can also play a central role in the decision about whether to apply for a guide dog. Although many owners decide to apply for a guide dog of their own accord, a significant proportion is recommended by others to apply. Evidently, family and friends can be influential in terms of both suggesting or encouraging application for a guide dog and, where they do not want to live with or be around a dog, they can discourage potential application. Similarly, providers of social and health care services are an important source of information about Guide Dogs' services. The implications of this research for service providers are discussed below.

Thirdly, and as expected, conceptualisations of guide dog ownership - including benefits, limitations and drawbacks - are perceived differently

according to owners' backgrounds and needs. While the proportion stating increased mobility as a benefit of owning a guide dog does not change significantly across different groups, other perceived benefits do. Women, for example, more commonly perceive a guide dog as offering security and a means of independence. Ownership of a guide dog is more likely to be seen by younger people and women as offering confidence, social contact and increased assistance from the public. Older (retired) people are more likely than younger owners to see the opportunity to go for a walk and get exercise as a benefit of a guide dog. Consistent with previous research (e.g., Lane et al, 1998), those living alone were found to be more likely to see companionship as a benefit of guide dog ownership. Men and older guide dog owners consider the responsibility and hard work involved in caring for their guide dog a greater drawback than women and younger owners. Women and older owners more often consider the inconvenience of not being able to take the dog certain places a limitation of ownership.

### ***Implications for service provision and social policy***

This research has thus begun to define the ways in which different groups perceive, and could potentially benefit from, a guide dog; and the circumstances in which other mobility aids may be more appropriate or convenient than a guide dog. Owning a guide dog involves taking on considerable responsibility and adapting one's lifestyle and routine to incorporate the needs of the dog. In some cases, a guide dog may not be the most appropriate or convenient mobility aid for a visually impaired person. For many others, a guide dog offers much more than increased mobility - for example, companionship and confidence. An understanding of the influence of different backgrounds and preferences should shape not only the design and targeting of information to different groups of potential owners (as mentioned above), but also the tailoring of mobility and other rehabilitation programs to meet individual service users' needs. Awareness of the various benefits of guide dog ownership demonstrated in this study and previous research should inform decision-making by potential guide dog owners and assist service providers in meeting the needs of their diverse client populations.

It is clear that a guide dog does not simply offer mobility and independence. In some cases, the psycho-social function of guide dogs may be more significant to owners than the practical benefits of owners (Valentine et al, 1993). This research has found that guide dog owners typically report their motivations for applying for a guide dog to be mobility-related, while the potential psycho-social benefits of ownership are widely recognised amongst the broader visually impaired population. Where evidence indicates the multiple rehabilitative functions of guide dogs, the psycho-social needs of potential owners should be assessed alongside mobility needs. This suggestion is consistent with Hart et al's (1987) contention:

“If it were demonstrated that social facilitation was a primary outcome of dog ownership, prescribing a dog for someone who experienced social isolation could be an appropriate strategy” (p.42).

It is vital to remember, however, that while this research has emphasised the tremendous impact a guide dog can have, tailoring services to individuals' needs (i.e. providing the *most appropriate* mobility aid for an individual's circumstances) is the hallmark of effective rehabilitation service provision. In fact, other research (Whitmarsh & Nzegwu, 2001) has found that service users are more likely to feel their quality of life has been improved by the service where they recalled staff discussing their individual needs and circumstances prior to service provision. This study and previous research have shown that there is a range of factors that can affect the appropriateness and success of guide dog ownership (and indeed ownership of any animal) (Hart, 2000; Duncan & Allen, 2000; Koda & Shimoju, 1999). Family and domestic circumstances, emotional and social needs, functional ability and requirements, and personal preferences determine whether an individual will benefit from, or even want to apply for, a guide dog. Such considerations should be central in planning appropriate rehabilitative services for visually impaired people. For example, while owning a guide dog can reduce the stigma of disability, it also requires a degree of psychological readiness, an acceptance of one's visual impairment, since the dog inevitably draws attention to the owner and their disability (Lambert, 1990; Sanders, 2000). Since the psychosocial benefits of animal ownership depend on the level of attachment owners feel for the animal (Nicholson et al, 1995; Garrity et al, 1989), ensuring a good match between a guide dog and potential owner is all the more important in securing a successful partnership. Developing the bond between owner and dog in order to maximise the animal's supportive function (Boldt & Dellmann-Jenkins, 1992) could thus be included in training programs for new assistance animal users. Conversely, the need for assistance dog providers to offer support when an assistance dog partnership ends has been highlighted elsewhere (Nicholson et al, 1995; Valentine et al, 1993). Similarly, the drawbacks to assistance dog ownership (e.g., responsibility involved, over-dependence to the exclusion of other mobility skills, over-attachment to the exclusion of human companionship, restricted access) can be reduced through appropriate training of owners (cf. Hart et al, 1996; Boldt & Dellmann-Jenkins, 1992) and by working to reduce social and physical barriers to guide dog owners' inclusion within society (Lambert, 1990; Valentine et al, 1993). These research findings also have implications for the dog's welfare, since fostering a close emotional bond between owner and dog is likely to result in benefits to the animal's welfare (Lane et al, 1998).

Previous research (e.g., Horowitz & Reinhardt, 1998; Lambert et al, 1982; Guide Dogs for the Blind Association, 1999) has identified the need amongst visually impaired people for formal or informal counselling and social support due to the huge psychosocial effects of vision loss (Dodds et al, 1991). One study, for example identified 50% of problems

associated with visual disability as mental health-related (Mangione et al, 1998). Rehabilitation workers therefore spend much of their time improving clients' confidence, motivation and self-esteem (Dodds et al, 1991). Where past research (e.g., Garrity & Stallones, 1998) suggests that benefits associated with companion animal ownership can approximate for human social support, this has important implications for the support role of companion and assistance animals in buffering the stressful impact of visual impairment, particularly at onset.

Finally, the social and policy context in which an assistance animal, such as a guide dog, is used affects its efficacy and appropriateness. It is therefore vital that legislation, such as the Disability Discrimination Act, continues to recognise the importance of an assistance animal to the quality of life and independence of its owner. This will reinforce social attitudes in this regard and open up the mobility choices of visually impaired users.

### ***Limitations of the study and areas for further research***

While the present study extends previous studies by utilising a large sample size, it relied on retrospective, self-reports of the benefits of guide dogs. It is important to bear in mind that this study did not include a control condition and therefore pre-existing psychological or situational differences between participants may influence perceived benefits of ownership (Sachs-Ericsson et al, 2002; Hart, 2000). Future research should include experimental design studies to compare differences between different aids (including control group, and/or pre/post study) in terms of functional, psychological and social benefits, and how different aids meet individuals' needs. Measuring the impact of services in relation to visually impaired users' needs is beginning to be integrated into rehabilitation and mobility service provision in general (e.g., De l'Aune, Williams & Welsh, 1999), but the particular impact and efficacy of guide dogs has been given comparatively little attention.

In particular, there is a need for greater empirical and theoretical research into the social and psychological support afforded to visually impaired people by assistance dogs. This research might focus, for example, on the phenomena of increased and changed social contact when disabled people are accompanied by an assistance dog by comparing public perceptions of guide dog owners and users of other (non-animal) mobility aids. Similarly, there is a need for a greater understanding of the potential role of assistance dogs in facilitating adjustment – both psychological and functional – to visual impairment. Further research might also assess the financial benefits of assistance dog ownership in terms of the reduced need for paid carer assistance, and “open the way for third-party reimbursement for assistance dogs” (Sachs-Ericsson et al, 2002, p.271).

Although some work has been done to develop a theoretical framework to support assistance animal outcome research, there is a need for this work to be extended. Sachs-Ericsson et al's (2002) recent review of outcome

research in the assistance dog field suggests that the range of benefits of assistance dog ownership relate to all levels at which disability can impair functioning:

- Body (general health benefits, e.g., reduced blood pressure, increased exercise);
- Activities (increased functioning/ mobility);
- Participation (increased independence and involvement in social, family and employment activities, improved safety); and
- Contextual factors (psychological and social e.g., increased social acknowledgement and acceptance, reduced loneliness and depression).

This framework – based on the World Health Organisation framework for disability and functioning (WHOQOL Group, 1993) – offers a means by which researchers and rehabilitation service providers can compare how particular disability aids, including assistance dogs, might benefit individuals with different needs and from different populations. Locating outcomes research on assistance dog ownership within a quality of life framework will contribute to a more coherent, scientific and rigorous approach to studying human-animal relationships in general and the roles of assistance animals in particular (Wilson, 1998). The findings from this study suggest that a guide dog may be seen to enhance the quality of life of a visually impaired person in the fullest sense, in terms of improved physical, psychological and social functioning. However, more comparative and theoretical work must be done to support this conclusion.

## **Acknowledgements**

The author wishes to thank the numerous voluntary organisations that agreed to support this research project, and the various participants – both guide dog owners and non-guide dog owners – who generously gave up their time for this study. The valuable contribution to this research of Dr Femi Nzegwu is also gratefully acknowledged.

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