Community Awareness of Assistance Dog Public Access Rights among Australian Adults

Tiffani J. Howell and Pauleen C. Bennett
Anthrozoology Research Group, School of Psychology and Public Health, La Trobe University

Assistance dogs fill a wide variety of disability assistance roles. In many jurisdictions, assistance dogs have the legal right to enter public places with their handlers, including those that are typically off-limits to pet animals. Unfortunately, unlawful denial of access to these places is common, which may be due to lack of understanding about these access rights. The aim of this exploratory study was to determine awareness of assistance dog public access rights among the general population of Australian adults. An online survey was completed by 328 Australian residents, only six of whom had ever lived with an assistance dog. Analyses were primarily descriptive. About half (51%) worked in an environment in which occasional encounters with an assistance dog and handler team would be possible, but most participants reported rarely or never encountering an assistance dog in their community or workplace. Nonetheless, awareness of assistance dog public access rights was generally high, with nearly all participants aware that ‘pet dog’ is not a synonym for assistance dog, and that assistance dogs have the legal right to access shopping centres and public transport. Awareness was lower for limitations on these access rights, such as gatekeepers’ (i.e., people who determine whether a person enters their premises) right to ask for evidence that the dog is an assistance dog, and the right to deny access to a dog that is not well-controlled. Women had significantly higher knowledge about this topic than men, and age was positively correlated with knowledge, but both had weak effect sizes. Future educational campaigns should aim to increase awareness of assistance dogs’ legal rights and obligations, to reduce the likelihood of unlawful access denials in the future.

Keywords: service dog, disability, assistance animal, legal public access

Author Note
Tiffani J Howell  [ORCID: 0000-0002-4932-5792]  https://orcid.org/0000-0002-4932-5792
Pauleen C Bennett  [ORCID: 0000-0001-5864-4464]  https://orcid.org/0000-0001-5864-4464

We have no known conflict of interest to disclose.

Correspondence concerning this article should be addressed to Tiffani J Howell, School of Psychology and Public Health, La Trobe University, PO Box 199, Bendigo, VIC 3552, Australia. Email: t.howell@latrobe.edu.au

Acknowledgements
We greatly appreciate the survey’s respondents who took the time to help us understand their awareness of assistance dog public access rights. We also thank the students in La Trobe University’s PSY3RPA/PSY3RPB ‘You can’t bring that dog in here!’ project group who assisted us with research design and data collection for this study. Finally, we appreciate the feedback provided by three anonymous reviewers, whose helpful suggestions improved the manuscript.
Assistance dogs are trained to high standards of behaviour and hygiene, and to help a person with disability (Bremhorst, Mongillo, Howell, & Marinelli, 2018). Assistance dogs were first employed as guide dogs, who have been helping people with a vision impairment navigate independently within their communities since World War I (Ostermeier, 2010). More recently, dogs have been trained for other types of disability support, including hearing and mobility impairments, psychiatric disabilities, developmental and intellectual disorders, and medical conditions such as diabetes and epilepsy (Ensminger & Breitkoff, 2010; Howell, Bennett, & Shill, 2016).

Existing scientific evidence investigating the impacts of assistance dogs on their handlers with disability, while sometimes lacking methodological rigour, is generally positive (Howell et al., 2016). Assistance dog handlers often report profound impacts of the dog on their disability management and overall quality of life. This was the case in early, preliminary reports (Audrestch et al., 2015), and it continues with recent, high quality studies (e.g. O’Haire & Rodriguez, 2018; Rodriguez, Bryce, Granger, & O’Haire, 2018).

In many jurisdictions around the world, including Australia, the United States (US) and United Kingdom (UK), assistance dogs are provided with special dispensation to legally enter public spaces that are typically off-limits to animals. For instance, the 1992 Disability Discrimination Act (DDA) in Australia, requires that assistance dog-handler teams must be provided access to most places that a person without a dog would be able to enter. Similar legislation also exists in the UK (Equality Act 2010) and in the US with the 1990 Americans with Disabilities Act (revised 2010). With a few exceptions (e.g., commercial kitchens, hospital operating rooms), public access for assistance dogs is protected under law.

Under the Australian DDA, ‘gatekeepers’ (i.e. individuals who are in a position to permit or disallow access to a place; Elliott & Hogle, 2013) are entitled to ask for evidence that the dog is an assistance animal before permitting access to a place, and may deny access to the handler if they refuse to provide such evidence. Unfortunately, there is no comprehensive explanation of exactly what may constitute ‘evidence’ in this context (Australian Human Rights Commission, 2016). Gatekeepers may also deny access if the assistance dog shows signs of an infectious disease that risks the health of others or is deemed not to be under the handler’s control. If the dog is healthy and well-behaved, and evidence is provided of their assistance animal status, it is not legal for them to be denied access to most places, according to the DDA.

Notwithstanding existing legislation protecting assistance dog public access rights, assistance dog handlers report that they are often denied access. While this has not been thoroughly empirically investigated, media reports of access denials are common (Bennett & Desai, 2016), and surveys of Guide Dog clients in the UK indicated that approximately three-quarters of handlers have had difficulty accessing public places, especially in taxis/private hire cars and in restaurants (Bennett & Desai, 2016; Guide Dogs UK, 2019). In Australia, assistance dog handlers have reported similar problems, highlighting access denials as a major disadvantage of having an assistance dog (Howell et al., 2016). Given how commonly assistance dog handlers appear to experience this phenomenon, it is important to understand awareness of public access rights among the general community. After all, many of these community members will be required to occasionally act as gatekeepers, and lack of knowledge about their legal obligations towards assistance dog handlers may be responsible for many access denials (Fowler, 2020). The aim of this exploratory study was to investigate knowledge of assistance dog public access rights, among an opportunistic sample of Australian adults.
**Methods**

This research study received approval from the La Trobe University College of Science, Health, and Engineering Human Ethics Committee (approval number HEC19279).

**Participants**

Australian residents ($N = 328$) completed an online survey. Most participants ($n = 241; 74\%$) were female, and the average age was 32 years old ($SD = 9$ years; range = 18 to 77 years). Most ($n = 274; 84\%$) had lived in Australia since they were born, and just eight participants ($2\%$) had lived in Australia for fewer than 6 years at the time of completing the survey. Half of participants ($n = 170; 52\%$) reported living in a suburban area, and one fifth ($n = 69; 21\%$) indicated that they lived in a regional city. The remainder reported living in a small country town ($n = 46; 14\%$) or an inner-city area ($n = 43; 13\%$).

The sample was generally well-educated, with $31\%$ ($n = 102$) holding an undergraduate degree, $18\%$ ($n = 59$) holding a post-graduate degree, and $17\%$ ($n = 55$) holding a trade certificate. Another $31\%$ ($n = 103$) reported that the highest level of education that they completed was Year 11 or Year 12, probably because we recruited heavily among university students. Most participants reported that they were working in a full-time ($n = 127; 39\%$) or part-time ($n = 140; 43\%$) capacity. Of these, a large majority of participants ($n = 214; 84\%$) reported that they were an employee in their workplace, while 27 respondents ($11\%$) indicated that they were a manager, and 15 ($6\%$) were self-employed.

Most participants reported currently owning or living with a dog ($n = 182; 56\%$) at the time of survey completion, while 103 ($31\%$) indicated that they had lived with a dog in the past, but not currently. Just 43 participants ($13\%$) reported never having owned or lived with a dog. The overwhelming majority ($n = 322, 98\%$) had never owned or lived with an assistance dog, with just six participants ($2\%$) reporting that they had owned or lived with an assistance dog, either at the time of completing the survey or previously.

**Materials**

An online survey was created for this study. It contained demographic questions, including items measuring the extent to which participants had been exposed to assistance dogs. We asked people to identify their workplace, to determine whether they worked in an environment which an assistance dog might enter (e.g., hospitality, retail, taxi). There were items gauging objective knowledge of assistance dogs and their legal access rights. Finally, a series of questions exploring attitudes towards assistance dogs was included in the survey but are not discussed in this report.

Items were generated based on the wording of the DDA itself, the Australian Human Rights Commission’s information about assistance dogs (Australian Human Rights Commission, 2016), and state and territory government websites about assistance dogs or animal management (e.g., Animal Welfare Victoria, 2021; Queensland Government, 2021). A group of third year undergraduate students assisted with item creation. To confirm face validity, a group of experts in human-animal relationships and assistance dogs reviewed the survey and provided feedback on early versions. The full survey is available as supplementary material.

**Procedure**

Australian residents who were at least 18 years old and able to read and write in English, were invited to complete the online survey. A group of approximately 30 undergraduate psychology students assisted with recruitment for the study. Recruitment proceeded primarily via social media, as students used their Facebook, Instagram, and Twitter pages to recruit participants. Friends and followers were encouraged to share the link on their own social media pages if they desired. The Anthrozoology Research Group
Facebook page also promoted the study. No paid social media advertisements were used. Flyers containing the weblink and QR code to access the survey were also posted around two La Trobe University campuses, Bundoora and Bendigo, and were distributed in the wider community near those two campuses.

Participants accessed the survey by navigating to the weblink provided in the recruitment materials. It was expected to take approximately 15 minutes to complete the survey. Upon completion, participants were given the opportunity to enter a prize draw to win one of four $50 Visa gift cards.

Analysis

All data analyses were completed with Statistical Package for Social Sciences (SPSS) v.26 (IBM, Armonk, NY, USA). Data were cleaned and incomplete survey responses excluded. Of the 389 people who began the survey, 61 were excluded for having completed less than 97% of the survey. In questions where participants were able to provide free-text responses, those responses were collapsed when possible into existing, or newly created, categories. All objective knowledge questions had a right or wrong answer, so responses were coded as correct or incorrect. A total of 31 objective knowledge items were included in analyses. A response was considered incorrect if the participant selected ‘I don’t know’ for items that included that option. We also created a composite variable with all 31 of these items, by summing the responses to all items, giving a possible range of 0-31.

Four items included in the survey were excluded from analysis; three of these were because the correct answer varied depending on the participant’s jurisdiction within Australia. These were ‘Do assistance dog puppies-in-training have the same legal access rights as fully certified assistance dogs?’, ‘Do assistance dogs legally have to be identifiable as assistance dogs (e.g. through a special ID card)?’, and ‘Are assistance dogs legally required to be trained by an accredited assistance dog provider?’. Public access for puppies in training appears to vary by state. Similarly, in some Australian states, such as Queensland, the state government is responsible for accrediting assistance dog providers and issues ID cards for dog-handler teams to gain public access (Queensland Government, 2021). This is not the case in all states and territories, however. The fourth item that was excluded asked whether assistance dogs are legally allowed in airplanes. Assistance dogs are not automatically permitted onto airplanes in Australia but are often permitted on board if permission is sought in advance. Due to possible confusion over the requirement of permission, this item was excluded. To avoid the risk of possible bias, we ran analyses with and without this item, and observed no substantial changes to the results.

We wanted to understand the extent to which participants would be likely to encounter an assistance dog in their workplace. Using the item asking people to indicate where they worked, we created a variable indicating whether the participant was likely to encounter an assistance dog in their workplace at least occasionally. This was coded as ‘yes’ for participants who selected the following workplaces: retail (e.g., shop, bank), hospitality (e.g., restaurant/café, hotel), public transport (e.g., train, tram, bus), airport, healthcare setting (e.g., hospital, medical practice), school, library, driver (e.g., taxi, chauffeur service). Participants who selected ‘none of these’ were coded as ‘no’. Using a Mann-Whitney U-test, we compared these groups on the composite objective knowledge variable, as well as all 31 knowledge variables individually. We also used the Mann-Whitney U-test to compare workplace type on frequency of encounters with assistance dogs in the workplace and in the wider community. Since all data were non-normally distributed based on the results of a Kolmogorov-Smirnov normality test, non-parametric tests were necessary.
To understand whether other demographic factors influenced objective knowledge of assistance dog public access rights, we used a Mann-Whitney U-test to compare men and women, and Spearman’s correlation to measure any relationship between age and knowledge. Kruskal-Wallis tests were also used to measure whether objective knowledge was influenced by pet dog ownership or working role (i.e., employee, manager, or self-employed).

**Results**

**Assistance dogs in the workplace and community**

Among participants who indicated that they worked full- or part-time, approximately half of participants indicated that they worked in an environment which we considered an assistance dog would be likely to enter ($n = 135$, 51%). Another 129 respondents (49%) reported that they worked in an environment which we considered an assistance dog would be unlikely to enter.

We asked all participants to indicate how often they had encountered an assistance dog (other than their own, if applicable) in their community and in their work environment, within the previous year. As shown in Table 1, most participants reported having few encounters with assistance dogs, either in their community or in their workplace.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Community</th>
<th>Work environment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n$</td>
<td>%</td>
</tr>
<tr>
<td>Never</td>
<td>29</td>
<td>9</td>
</tr>
<tr>
<td>Once or twice</td>
<td>84</td>
<td>26</td>
</tr>
<tr>
<td>A few times</td>
<td>116</td>
<td>35</td>
</tr>
<tr>
<td>Once per month</td>
<td>25</td>
<td>8</td>
</tr>
<tr>
<td>A few times per month</td>
<td>45</td>
<td>14</td>
</tr>
<tr>
<td>Once per week</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>A few times per week</td>
<td>16</td>
<td>5</td>
</tr>
<tr>
<td>Every day or almost every day</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>More than once per day</td>
<td>1</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>

We also compared workplace type (i.e., workplaces we consider likely to encounter assistance dogs vs those that are not) on frequency of encounters with assistance dogs. There was no difference between groups on frequency of encounters within the community ($p = 0.144$), but there was a difference in frequency of encounters in the workplace, $U = 6739.5$, $z = -3.034$, $p = 0.002$, $r = 0.19$, with a small effect size. Participants who worked in a place where we expected an assistance dog might present ($Md = 2$, $n = 132$) reported a higher frequency of encounters than those who did not ($Md = 1$, $n = 129$).

**Objective knowledge of assistance dog public access**

A composite variable made of 31 individual items about objective knowledge found a high degree of awareness about assistance dogs ($Md = 25$, min = 0, max = 31), as shown in the histogram presented in Figure 1.
The individual items investigating objective knowledge of assistance dog public access rights, along with the response deemed correct and the percentage of correct responses for each item, are listed in Table 2.

Table 2: Correct response and percentage of correct responses for each item related to objective knowledge of assistance dog public access rights

<table>
<thead>
<tr>
<th>Item</th>
<th>Correct response</th>
<th>Valid correct (n)</th>
<th>% 'don’t know'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which of the following terms mean the same thing as ‘assistance dog’?</td>
<td></td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Pet dog</td>
<td>No</td>
<td>99 (324)</td>
<td></td>
</tr>
<tr>
<td>None of these</td>
<td>No</td>
<td>94 (307)</td>
<td></td>
</tr>
<tr>
<td>Service dog</td>
<td>Yes</td>
<td>86 (281)</td>
<td></td>
</tr>
<tr>
<td>Companion dog</td>
<td>No</td>
<td>68 (223)</td>
<td></td>
</tr>
<tr>
<td>Emotional support dog</td>
<td>No</td>
<td>42 (139)</td>
<td></td>
</tr>
<tr>
<td>Therapy dog</td>
<td>No</td>
<td>34 (112)</td>
<td></td>
</tr>
<tr>
<td>In which of the following places are assistance dogs legally allowed?</td>
<td></td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Parks</td>
<td>Yes</td>
<td>98 (321)</td>
<td></td>
</tr>
<tr>
<td>Shopping Centres</td>
<td>Yes</td>
<td>96 (314)</td>
<td></td>
</tr>
<tr>
<td>Public transport</td>
<td>Yes</td>
<td>95 (313)</td>
<td></td>
</tr>
<tr>
<td>Schools</td>
<td>Yes</td>
<td>92 (301)</td>
<td></td>
</tr>
<tr>
<td>Banks</td>
<td>Yes</td>
<td>92 (300)</td>
<td></td>
</tr>
<tr>
<td>Cafes/restaurants</td>
<td>Yes</td>
<td>91 (298)</td>
<td></td>
</tr>
<tr>
<td>Clothing stores</td>
<td>Yes</td>
<td>90 (295)</td>
<td></td>
</tr>
<tr>
<td>Airport</td>
<td>Yes</td>
<td>90 (294)</td>
<td></td>
</tr>
<tr>
<td>Public libraries</td>
<td>Yes</td>
<td>90 (293)</td>
<td></td>
</tr>
</tbody>
</table>
Supermarkets Yes 90 (293)
University lecture theatres Yes 87 (286)
Hospital operating rooms No 86 (282)
Museums Yes 85 (277)
Hotels Yes 84 (275)
Commercial Kitchens No 81 (267)
Medical practices Yes 81 (265)
Arenas/sporting events/concerts Yes 79 (258)
Hospital waiting rooms Yes 76 (248)
Gym Yes 75 (246)
Uber/Taxis Yes 74 (241)

Is it lawful for retail shop workers to deny access to people with assistance dogs? No 77 (253) 17 (57)

What is the most accurate definition of an assistance dog? *see below 54 (178) n/a

Do all types of assistance dogs share the same legal rights to access public places? (e.g., guide dogs, autism assistance dogs, medical detection dogs) Yes 48 (155) 40 (130)

Is it lawful for retail shop workers to ask the owner to prove that their dog is an assistance dog? Yes 42 (138) 39 (129)

If an assistance dog behaves badly in a public place, is it lawful for the owner to be asked to remove the dog? Yes 31 (101) 55 (179)

*Correct response for this item was: A dog that is highly trained to behave well in public, and helps its owner alleviate the effects of their disability

Demographic factors influencing knowledge of assistance dog public access rights

A Mann-Whitney U-test was used to compare men and women on objective knowledge of public access rights for assistance dogs, and the results were significant, but with a small effect size ($U = 8457$, $z = -2.10$, $p = 0.016$, $r = 0.13$). Men ($Md = 24$, $n = 84$) scored significantly lower than women ($Md = 25$, $n = 240$) on objective knowledge. Spearman’s correlations also revealed a significant, small, positive relationship between age and knowledge ($r = 0.17$, $p = 0.002$), indicating that older participants had a higher level of objective knowledge about assistance dog public access rights.

No significant differences were observed when analysing objective knowledge by workplace role or dog ownership (all $p > 0.05$). When comparing participants who worked in an environment in which an assistance dog was considered likely to present versus those who did not, there was no difference on any objective knowledge items, or the composite variable consisting of all items combined (all $p > 0.05$).

Discussion

An online survey helped us to better understand community awareness of assistance dog public access rights, among an opportunistic sample of Australian adults. This preliminary study was designed to be exploratory, so the results presented are primarily descriptive. Nonetheless, the outcomes provide insights into people’s awareness of assistance dogs, which may be helpful in creating educational campaigns aimed at reducing the frequency of assistance dog handlers being unlawfully denied access to public places.

The descriptive results showed that most Australian participants had relatively few encounters with assistance dogs in their community or in their workplace. Nonetheless, many objective knowledge items had a high percentage of correct responses, indicating
that many people have considerable awareness about assistance dog rights even if they do not regularly encounter them. There was a high degree of variation in responses, however. For instance, 99% of respondents correctly identified that the term ‘pet dog’ is not a synonym for assistance dog, but there was less certainty about the terms ‘companion dog’, ‘emotional support dog’, or ‘therapy dog’. This reflects a problem within the animal-assisted services industry, in which different terms are sometimes used to refer to the same working role (Howell, Bennett, & Tepper, 2019; Parenti, Foreman, Meade, & Wirth, 2013).

For the purposes of this study, we relied on the Australian Disability Discrimination Act 1992, which defines an assistance animal (provided here verbatim) ‘as a dog or other animal:

(a) accredited under a law of a State or Territory that provides for the accreditation of animals trained to assist a person with a disability to alleviate the effect of the disability; or
(b) accredited by an animal training organisation prescribed by the regulations for the purposes of this paragraph; or
(c) trained:

(i) to assist a person with a disability to alleviate the effect of the disability; and
(ii) to meet standards of hygiene and behaviour that are appropriate for an animal in a public place.’

Unlike the US definition of ‘service dog’ as provided in the Americans with Disabilities Act, the Australian legal definition does not include specific trained tasks that must be performed to assist the person with disability, although the animal must be trained to help a person mitigate the impacts of their disability. Nonetheless, given the access rights and disability assistance inherent in Australian assistance dogs and US service dogs, we considered these two terms to be synonyms, which most participants correctly indicated.

Australian federal legislation does not define or provide any protections for an emotional support animal, so we defined it as ‘an animal that provides emotional support for a person with a diagnosed mental illness’ (Howell et al., 2019). We relied on IAHAIO’s definition of animal-assisted therapy (IAHAIO, 2018) to define therapy dog as a dog that plays a role in a goal-directed therapeutic program led by a qualified professional (Howell et al., 2019). We considered companion dog to be a synonym of pet dog. It is important to establish clear, operationalised definitions for each of these terms, for use by governments, industry, researchers, and the wider community.

Australian participants in the current study were generally aware of the types of places that assistance dogs are legally permitted to enter, with a correct answer being supplied by most participants for all places. The lowest percentage correct, at 74%, was recorded for Uber/taxis, despite news media reports that have focused on illegal denial of access for assistance dogs by taxi or Uber drivers (BBC News, 2020; Faulkner, 2019; Foden, 2020; Slessor, 2019).

Participants in our study were unclear on some of the subtleties of assistance dog laws. For instance, all assistance dog types (e.g., guide, mobility, autism) share the same rights of public access, but just under half of participants answered this correctly. There was also a low percentage of correct responses for the items about gatekeepers being entitled to ask for proof that the dog is an assistance dog and being entitled to ask for the handler to remove the dog if it is behaving badly. For these items, many respondents reported that they did not know the correct answer, as opposed to guessing incorrectly. These topics should be included in any educational campaign aimed at increasing awareness of assistance dog public access rights.

In the current study, women scored significantly higher than men on objective knowledge of assistance dog public access rights, and age was positively correlated with
knowledge. In both cases, the effect sizes were small. This is consistent with previous research investigating knowledge of assistance dog laws. In one Japanese study, women were more likely than men to report knowing the law governing assistance dog public access very well (Matsunaka & Koda, 2016). Unlike the current study, however, Matsunaka and Koda did not ask participants to answer specific questions about the law, so it is unclear whether their perceived knowledge corresponded with actual knowledge of the law. In another study, also based in Japan, older participants were more likely than younger participants to know the details of the Japanese assistance dog law (Yamamoto, Hart, Ohta, Matsumoto, & Ohtani, 2014). For example, participants were often unsure about whether assistance dogs could be employed for disabilities other than visual impairments, the severity of the disability required to be eligible for an assistance dog, the procedure to apply for a dog, and public access rights. This study’s participants consisted solely of people with physical disabilities, so even among the ‘target demographic’ for assistance dogs, lack of knowledge was common (Yamamoto et al., 2014).

In the current study, there was no difference observed in assistance dog knowledge among Australians in different workplace roles (i.e., employee, manager, or self-employed) or different working environments in the current study. Knowledge was high among all participants, regardless of workplace role or environment. This contrasts with a previous study in which business owners in workplaces where assistance dogs are legally permitted to enter were asked to report their level of knowledge about the Japanese assistance dog public access law (Matsunaka & Koda, 2013). A large majority (84.5%) reported knowing nothing about the law or only knowing the name of the law. Just 13% of business owners reported knowing the content of the law. Furthermore, 91.4% of respondents indicated that they knew little about how to respond to an assistance dog entering their premises (Matsunaka & Koda, 2013).

While little scientific research has been conducted so far into the frequency and contexts in which assistance dog owners are denied access to public places, there have been reports in media (Bennett & Desai, 2016) and other publications (Howell et al., 2016) in which handlers complain of these access denials. Further research is needed to determine just how common this problem is, and the impact on the handler’s wellbeing when they experience this. These sorts of encounters could prove particularly problematic for people who have an assistance dog to help them manage an ‘invisible’ disability, including a psychiatric disability, with psychiatric assistance dogs becoming increasingly common (Ensminger & Breitkoff, 2010). It is therefore imperative that access denials cease.

Since the Australian Disability Discrimination Act (1992) requires assistance dogs to be permitted into nearly all public places that their handler might like to go, people who deny access to these places are in breach of federal law. This is the case in the US and UK as well, as assistance dogs are afforded legal access to public spaces by the Americans with Disabilities Act (1990) and Equality Act (2010), respectively. In many cases, these access denials may be founded in lack of awareness about existing disability access laws. For instance, a restaurant employee who tries to block entry of an assistance dog into the indoor dining area may be unaware that they have special dispensation to enter, but may be concerned about breaching laws governing hygiene control in food service (e.g. C. Campbell, 2019). In such cases, educating staff would likely be enough to prevent such problems happening in the future. It is also possible that many gatekeepers are fully aware of their obligations to permit assistance dogs legal access under the law, but deny access based on their attitudes or beliefs. For instance, a concern over dog hygiene in public places, such as restaurants, could explain some access denials, as fears of bacteria have been manipulated by marketers for centuries (N. Campbell & Deane, 2019). This possibility should be investigated.
A meta-analysis showed that educational interventions for children aimed at improving knowledge of and/or attitudes towards people with a disability can be effective (Lindsay & Edwards, 2013). Systematic reviews aimed at determining the effectiveness of similar interventions for adults are inconclusive due to the small number of high-quality studies in that area (Phillips, Deiches, Morrison, Chan, & Bezyak, 2016; Scior, 2011). Future research should aim to improve rigour in this area to better understand the impact of these educational campaigns, and what elements (e.g., knowledge, attitudes, cultural/personal preferences) should be emphasised in order to improve outcomes for disability access.

Unfortunately, one long-term campaign aimed at educating the general public about assistance dog access rights in the UK has not yet been successful. Four years after launching their Access All Areas campaign, a survey of Guide Dog clients in the UK has shown no improvement in access, with 76% of respondents reporting an access denial at some point in the past, and 42% reporting an access denial within the previous 12 months (Guide Dogs UK, 2019). In the case of taxis and private hire vehicles, the situation appears to be getting worse: in 2015, 42% of Guide Dog clients who had reported an access denial indicated that they had been denied access to a taxi (Bennett & Desai, 2016), while in 2019, this number had increased to 73% (Guide Dogs UK, 2019). The reasons for this are unclear, but it is possible that the campaign simply has not reached its desired audience. Indeed, Guide Dogs UK has advocated for all taxi drivers to be required to undertake equality training, but uptake of this requirement varies by jurisdiction (Guide Dogs UK, 2019).

A key reason why access denials may be occurring is the problem of ‘fake’ assistance dogs (i.e., people who claim that their untrained pet dog is an assistance dog in order to take the dog wherever they go). Fake assistance dogs have become a problem in public places in the US (Elliott & Hogle, 2013), the UK (Bennett & Desai, 2016) and Australia (Harpur et al., 2016). Gatekeepers may feel caught between denying access to a suspected fake assistance dog who could risk the safety of other patrons, and the obligation to permit access to people with a disability (Elliott & Hogle, 2013). Several authors have argued that the long-term solution to this problem is for certified assistance dog-handler teams to be provided with a government-issued ID card (e.g. Bennett & Desai, 2016; Elliott & Hogle, 2013; Ensminger & Breitkoff, 2010; Harpur, 2010). In the US, the Americans with Disability Act does not permit gatekeepers to request evidence of the dog’s status as an assistance dog. Gatekeepers in Australia are permitted to request evidence according to the Disability Discrimination Act, but there are no comprehensive explanations of what sort of evidence is acceptable. Given this potential for confusion, we support the idea of a government-issued ID card (Howell et al., 2016), which is already in place in Austria (Bremhorst et al., 2018). In the meantime, gatekeepers may benefit from learning the intricacies of disability access laws to feel more empowered in their decision-making (e.g., they have the right to ask for evidence, and they can deny animals that are not under their handler’s control).

Limitations and future directions

The current study was a preliminary investigation of Australian adults’ awareness of assistance dog public access rights, and our sample showed a generally high level of knowledge about this issue, although there was room for improvement in some nuanced areas. It is unclear whether this sample is representative of the wider Australian population, but demographically, there are some differences. For instance, women comprised about three-quarters of the sample. Furthermore, over 80% of our respondents were in full- or part-time work, compared to 63% in the wider Australian community as of February 2020 (Australian Bureau of Statistics, 2020). Therefore, our participants’ level of knowledge about public access may not reflect that of most Australians. On the other hand, only six
participants had ever owned or live with an assistance dog, so it is unlikely that our sample differed substantially from the wider population of Australians in this knowledge, most of whom would have little or no experience with denials of access. Investigating whether assistance dog owner handlers differ from the general community in public access awareness would be useful to determine whether they are, in fact, more knowledgeable on this issue.

Future research should introduce an intervention aimed at further improving knowledge and evaluate it using a similar survey, ideally with a representative sample of Australians. Given the differences in various states and territories regarding certain aspects of assistance dog public access laws, three of the items were excluded from analysis. It would be useful to examine knowledge of these items, based on the specific laws of each participant’s jurisdiction. For example, a future study could retain the excluded items but include the phrase ‘in your state or territory’.

The survey itself should be further validated to ensure it is a valid measure of objective knowledge of assistance dog public access rights. A study aimed specifically at the gatekeepers who make determinations about assistance dog access would also be useful. Similar research is also needed in other parts of the world, as cultural differences, as well as differences in laws around assistance dog public access, may impact results.

**Conclusion**

Assistance dogs are becoming more common in developed, English-speaking countries, and fulfil an increasing variety of disability assistance roles. Unfortunately, many handlers report that they are sometimes unlawfully denied access to public spaces. This exploratory study aimed to measure Australians’ knowledge of assistance dog public access rights. Despite relatively few encounters with assistance dogs in their everyday lives, participants reported a high level of objective knowledge about assistance dogs and their right to access public spaces. There was less knowledge about specific access issues, such as the rights of gatekeepers to ask for proof that the animal is an assistance dog, and the legal right to deny access to the dog in certain circumstances. Future educational campaigns should aim to increase awareness of these public access rights, to reduce the likelihood of unlawful access denials in the future.

**References**


Supplemental Materials to Follow
What is that dog doing in here?

What is your gender?
- Male
- Female
- Gender diverse/intersex
- Prefer not to say

What year were you born?

▼ 2001 ... 1920

Do you currently study and/or work at a university in Australia? Please select all that apply.
- Yes - La Trobe University
- Yes - Another university in Australia (please write) ___
- No

How long have you lived in Australia?
- Since birth
- More than 10 years
- 6 - 10 years
- 3 - 5 years
- 1 - 2 years
- Less than 1 year

Which of the following best describes the area in which your home is located?
- Urban (Inner city)
- Suburban (over 10km from city)
- Regional city (population 50,000 or more)
- Country town/Island/rural (population less than 50,000)

What is the highest level of education you have completed?
- No formal schooling
- Year 10 or below
- Year 11 or Year 12
- TAFE diploma, trade certificate, apprenticeship
- University (undergraduate)
- University (post-graduate)
- Other (please write) ________________________________________________

Which of the following best describes your current situation in relation to work?
- Retired
- Unemployed
- Unable to work
- Engaged in home duties
- Volunteer - unpaid
- Part time or casual paid work (30 hours or less per week or seasonal work)
- Full time paid work (more than 30 hours per week)
- Other (please write) ________________________________________________

Display This Question:
If Which of the following best describes your current situation in relation to work? = Part time or casual paid work (30 hours or less per week or seasonal work)
Or Which of the following best describes your current situation in relation to work? = Full time paid work (more than 30 hours per week)
Where do you work/volunteer? (please select all that apply)

- Retail (e.g. shop, bank)
- Hospitality (e.g. restaurant/cafe, hotel)
- Public transport (e.g. train, tram, bus)
- Airport
- Healthcare setting (e.g. hospital, medical practice)
- School
- Library
- Driver (e.g. taxi, chauffeur service)
- None of the above

Which of the following best describes your workplace role?

- Employee status
- Manager status
- Self-employed

Have you ever owned or lived with a pet dog?

- Yes - currently
- Yes - in the past but not currently
- No

Have you ever owned or lived with an assistance dog?

- Yes - currently
- Yes - in the past but not currently
- No

Who was/is the primary handler for the assistance dog(s) you have lived with? Please select all that apply.

- Me
- Someone else in my household (please write their relationship to you, e.g. parent, sibling, housemate) _______________________________
In the past year, how often have you encountered assistance dogs (other than your own, if applicable) in your community?

- Never
- Once or twice
- A few times
- Once per month
- A few times per month
- Once per week
- A few times per week
- Every day or almost every day
- More than once per day

How often do you encounter assistance dogs (other than your own, if applicable) in your work environment?

- I have never encountered an assistance dog in my work environment
- Once or twice per year
- A few times per year
- Once per month
- A few times per month
- Once per week
- A few times per week
- Every day or almost every day
- More than once per day

Do assistance dogs legally have to be identifiable as assistance dogs (e.g. through a special ID card)?

- Yes
- No
- I don't know

Is it lawful for retail shop workers to deny access to people with assistance dogs?

- Yes
- No
- I don't know

Is it lawful for retail shop workers to ask the owner to prove that their dog is an assistance dog?

- Yes
- No
- I don't know
Which of the following terms mean the same thing as ‘assistance dog’? Please select all that apply

- Service dog
- Therapy dog
- Emotional support dog
- Companion dog
- Pet dog
- None of these

Are assistance dogs legally required to be trained by an accredited assistance dog provider?

- Yes
- No
- I don't know

Do assistance dog puppies-in-training have the same legal access rights as fully certified assistance dogs?

- Yes
- No
- I don't know

What is the most accurate definition of an assistance dog?

- A dog that is highly trained to behave well in public, and is used for emotional support by a person with disability
- A dog that is highly trained to behave well in public, and helps its owner alleviate the effects of their disability
- A dog that is highly trained to behave well in public, owned by a person with disability
- A highly trained, certified dog that is involved in structured therapeutic programs for people with disability
In which of the following places are assistance dogs legally allowed? Please select all that apply.

- Cafes/restaurants
- Airplanes
- Hospital operating rooms
- Hospital waiting rooms
- Uber/Taxis
- Public libraries
- Commercial kitchens
- Banks
- Clothing stores
- Shopping Centres
- Parks
- Supermarkets
- Public transport (e.g. trains, trams, buses)
- Hotels
- Airports
- Medical practices
- Schools
- Gyms
- University lecture theatres
- Arenas/sporting events/concerts
- Museums

Do all types of assistance dogs share the same legal rights to access public places? (e.g., guide dogs, autism assistance dogs, medical detection dogs)

- Yes
- No
- I don't know

If an assistance dog behaves badly in a public place, is it lawful for the owner to be asked to remove the dog?

- Yes
- No
- I don't know
Please indicate the extent to which you agree with the following statements. Allowing assistance dogs to accompany their owner with disability into a café/restaurant:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is unhygienic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is necessary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is illegal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is appropriate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is up to the café/restaurant staff to decide</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is inappropriate when someone nearby is allergic to dogs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is inappropriate when someone nearby is afraid of dogs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Please indicate the extent to which you agree with the following statements.
Allowing assistance dogs to accompany their owner with disability onto public transport:

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is unhygienic</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Is necessary</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Is illegal</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Is appropriate</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Is up to the driver to decide</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Is inappropriate when someone nearby is allergic to dogs</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Is inappropriate when someone nearby is afraid of dogs</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Please indicate the extent to which you agree with the following statements. Allowing assistance dogs to accompany their owner with disability into a hotel:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is unhygienic</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Is necessary</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Is illegal</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Is appropriate</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Is up to the hotel staff to decide</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Is inappropriate when someone nearby is allergic to dogs</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Is inappropriate when someone nearby is afraid of dogs</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Please indicate the extent to which you agree with the following statements.

Allowing assistance dogs to accompany their owner with disability into the passenger cabin of an airplane:

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is unhygienic</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Is necessary</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Is illegal</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Is appropriate</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Is up to the crew to decide</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Is inappropriate when someone nearby is allergic to dogs</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Is inappropriate when someone nearby is afraid of dogs</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Please rate your level of agreement with the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel uncomfortable when I see someone approaching with an assistance dog</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some people claim their pet dog is an assistance dog to cheat the system</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>People should have to prove that their assistance dog is legitimate before being given access to public places with the dog</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assistance dogs are beneficial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I support the use of assistance dogs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assistance dogs should be allowed to accompany their owners into public places</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assistance dogs are well behaved</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I enjoy being in the presence of assistance dogs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shop workers have the legal right to deny assistance dogs access to their shops</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assistance dogs are important to their owners</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assistance dogs are well trained</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landlords have the power to decide whether they accept assistance dogs on their property</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is fine to pet an assistance dog when they are in the community with their owner with disability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like talking to people with assistance dogs when I see them in my community</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is fine to play with an assistance dog when they are in the community with their owner with disability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Please rate your level of agreement with the following statements.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>My friends and family would happily eat next to an assistance dog at a cafe or restaurant</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>My family or friends would want me to stand up for someone with an assistance dog who is being wrongfully denied access to a public place</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>My family or friends would complain if they were seated next to someone with an assistance dog inside a cafe or restaurant</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Display This Question:

If Which of the following best describes your current situation in relation to work? = Part time or casual paid work (30 hours or less per week or seasonal work)

Or Which of the following best describes your current situation in relation to work? = Full time paid work (more than 30 hours per week)

Please rate your level of agreement with the following statement.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>My colleagues would be comfortable having an assistance dog in our workplace</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Please indicate the extent to which you agree with the following statements about people with assistance dogs accessing public places.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is not within my power to do anything when an assistance dog owner is being denied access</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is not my responsibility to stand up for an assistance dog owner who is being denied access</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am confident that I could stand up for an assistance dog owner being denied access</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is difficult to help an assistance dog owner who is being denied access</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would know how to help an assistance dog owner who is being denied access</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Display This Question:

If Which of the following best describes your current situation in relation to work? = Part time or casual paid work (30 hours or less per week or seasonal work)
Or Which of the following best describes your current situation in relation to work? = Full time paid work (more than 30 hours per week)

Please indicate the extent to which you agree with the following statement about people with assistance dogs accessing public places.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>If someone with an assistance dog entered my workplace I would ask them to leave</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>