

The Gift of Dignity

Second Public Perceptions Survey



Breaking Barriers to Inclusion

Understanding Public Perceptions of Assistance Dogs in Singapore

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Abstract

Official findings report on the social awareness, attitudes, and concerns about Singaporeans with Disabilities using Assistance Dogs from public perceptions data collected in Q4 2022.

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Executive Summary

K9Assistance, a registered charity whose mission is to promote the use and acceptance of Assistance Dogs (ADs) in Singapore, carried out this second Public Perceptions Study (PPS) to build upon and widen the findings report of our first Public Perception Survey conducted in 2021. It sought to capture up-to-date views of Singaporeans regarding their social awareness, attitudes, and concerns towards ADs and their handlers with disabilities.

According to the Rapid Transit Systems Regulations Chapter 263A, Section 42, Regulation 8(1), (3), ADs can accompany individuals with hearing or vision impairment on railway premises. However, as of March 2023, national policies and legislation supporting the public use of Seeing-Eye Dogs (SEDs) for the Blind and Vision-Impaired (VI) still do not extend to other types of ADs supporting people with varying disabilities. These include Autism ADs for the Autistic, Hearing Dogs for the d/Deaf or Hard-of-Hearing, and Mobility ADs for Persons with Mobility Needs.

From October 2022 to December 2022, K9Assistance recruited 658 participants to participate in the second PPS. The participants were divided into three groups. Group A and B's participants were given surveys to complete, while Group C's participants were engaged through Focus Group Discussions (FGDs).

Results indicate a general public openness and support for ADs. Most participants indicated they were willing to share public spaces with ADs and their disabled handlers – 90% from Group A and 99% from Group B. Group B's participants, who had the opportunity to interact with an AD in person and watched an educational video on ADs, expressed greater awareness and support for them than Group A's. Group C's participants generally expressed positive sentiments about ADs, sharing, for instance, how they felt respect, compassion and even awe from their prior encounters with AD in public spaces. Concerns about ADs raised included hygiene, safety, fear of dogs and religious considerations.

The recommendations are for educational campaigns on ADs to emphasise the relatability and representation of ADs and those who rely on ADs in their day-to-day lives and to encourage greater collaboration with government agencies in its outreach campaigns. State support and improving access to public education on ADs are vital for K9Assistance to continue advocating for their use and acceptance in Singapore.

For ease of accessibility, this report is presented in Arial font, with a font size of 14.

Contents

Executive Summary	2
1. Introduction	7
1.1 Background	7
1.1.1 Purpose	7
1.1.2 Mission	7
1.1.3 Definition	8
1.1.4 Assistance Dogs	9
1.2 Facts and Figures	10
1.2.1 Disability Prevalence	10
1.2.2 Disability Employment	11
1.2.3 COVID-19	12
1.2.4 Inclusive Attitudes Survey	13
1.2.5 National Policy	14
1.2.6 Public Access	15
2. Methodology	17
2.1 Consideration of Demographic Factors: Racial and Ethnic	c Minority
Participation	18
2.2 Group A	19
2.3 Group B	20
2.4 Group C	21
2.5 Limitations	22

3. Findings	23
3.1 Factors Influencing Public Attitudes towards ADs: Group A and E	
3.2 Possible Factors Affecting Attitudes Towards ADs in Public Place	
	25
3.2.1 Education and Age	25
3.2.2 Enhancing Understanding Through Educational Video	26
3.2.3 Impact of AD Education and Awareness Efforts	26
3.3 Group C	. 27
3.3.1 Raising Awareness and Addressing Knowledge Gaps: The	
Need for Education on ADs	27
3.3.2 Increasing Acceptance and Inclusion: Personal Factors	
Shaping Attitudes Towards ADs in Public Places	28
3.3.3 Promoting Acceptance and Empowerment: The Role of	
Government in Educating the Public on ADs	29
3.3.4 Balancing Concerns with Acceptance: Understanding Public	
Perceptions towards ADs in Shared Spaces	30
3.3.5 Group C's Concerns: Lack of Space for ADs in Singapore	32
3.3.6 Group C's Perceived Concerns: Balancing Personal Comfort	
and Support for AD in Singapore	33
3.4 Religious and Cultural Differences	34
3.4.1 Cultural Acceptance of ADs among Participants from Minority	У
Ethnic Groups in Singapore	35

4. Recommendations	. 36
4.1 Continuous education for all generations	. 36
4.2 Seeing is Believing	. 37
4.3 Breaking barriers: Need for legislation to support ADs in public	
places	. 37
5. Conclusion and Implications	. 39
References	. 42
Appendices	. 49
Appendix A: List of Questions for both Group A and B participants	. 49
Appendix B: List of Questions for Group C participants	. 50
Appendix C: Educational video shown to Group B's participants	. 51
Appendix D: Demographics of Group A participants	. 52
Appendix E: Demographics of Group B participants	. 54
Appendix F: Demographics of Group C participants	. 56
Appendix G: Recommendations Table	. 58

1. Introduction

1.1 Background

1.1.1 Purpose

K9Assistance, a registered charity whose mission is to promote the use and acceptance of ADs in Singapore, conducted the second Public Perceptions Study (PPS) to build upon and widen our first Public Perceptions Survey in 2021. It wanted to capture up-to-date views of Singaporeans regarding their awareness, attitudes, and concerns towards ADs. Its findings will enable us to improve our educational campaigns and programmes and better contextualise our discussions with key stakeholders to foster a more caring and inclusive national landscape for Singaporeans with disabilities and their families.

1.1.2 Mission

At K9Assistance, we believe Singaporeans with disabilities should be empowered and enabled to participate more equitably and holistically in mainstream society. We seek to bridge the gap between people with disabilities and the non-disabled, improving the lives of Persons with Disabilities (PWDs) in Singapore by providing them with bona fide ADs from the end of 2024 onwards.

1.1.3 Definition

ADs serve one disabled handler and are trained to perform at least three tasks to help mitigate their impairments (Assistance Dogs International, n.d.). ADs give PWDs the gift of dignity by assisting them in meeting their daily needs and enhancing their everyday social interactions (Baxter & Beresford, 2016). They provide Singaporeans with disabilities and their families with physical and sensory support and personal companionship. ADs can enable PWDs to lead life to the fullest, but they can only do this if they are allowed public access.

1.1.4 Assistance Dogs

There are only six working Seeing-Eye Dogs (SEDs) and no other types of ADs in Singapore. SEDs are ADs which serve Blind and Vision-Impaired (VI) individuals. Based on a study conducted by Chua, Koh, and Cheong (2019), there are approximately 60,000 persons with vision impairments in Singapore. This means that only 0.01% of the VI population in Singapore uses a SED. Thus, the need for ADs in Singapore is markedly underserved. In Melbourne, Australia, which has a population similar to Singapore's, one of its two SED schools has trained 200 dogs alone. If we were to infer that figure to include other disabilities and ADs, it would be around 1,600.

K9Assistance is the only local charity organisation that provides internationally-accredited ADs for Singaporeans with physical disabilities, the d/Deaf or Hard-of-Hearing, Vision Impaired and Autistic individuals. However, this mission cannot come to fruition until community-level and societal understanding, support, and protective policies permit public access to all ADs beyond SEDs, helping Singaporeans with disabilities thrive with dignity as citizens and contributing members of our societal landscape.



1.2 Facts and Figures

1.2.1 Disability Prevalence

According to the latest Singapore Census of Population (Department of Statistics, 2020), nearly 100,000 Singaporeans faced difficulty performing or could not perform one out of the six main activities of daily living: Communication, Focus or Memory, Hearing, Mobility, Self-Care, and Vision. Based on current population figures, it can be estimated that around 3% of Singaporean residents have been assessed and diagnosed to have at least one disability (SPD, n.d.).

However, this number in Singapore will likely be much higher based on the global disability prevalence figures suggested. According to the World Health Organisation (WHO) (2011), about 15% of the world's population live with some form of disability, with 2% to 4% experiencing significant difficulties in functioning; over 5% of the global population requires rehabilitation to address their 'disabling' hearing loss (WHO, 2023), about 1% has ASD (Therapeutic Pathways, 2021; WHO, 2022), and approximately 2.2 billion people worldwide have a vision impairment (WHO, 2019). Thus, the prevalence rate of disability in Singapore is unlikely to differ significantly from global statistics.



1.2.2 Disability Employment

In Singapore, the economic and social participation of PWDs in civil society remains substantially low compared to that of the majority non-disabled resident population. According to the Ministry of Manpower (2019), only 28.6% of Singaporeans with disabilities aged 15 to 64 were found to be employed. In 2020 and 2021, that figure rose slightly by 1.5% to 30.1% (Ministry of Social and Family Development, 2022). In contrast, the overall employment rate of Singaporeans last year was more than double that at 67.5% (Ministry of Manpower, 2022).



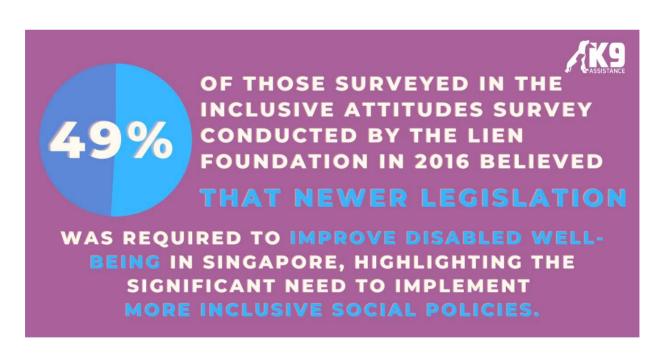
1.2.3 COVID-19

During the nationwide implementation of COVID-19 safe distancing measures from 2020 to 2022, many Singaporeans with disabilities experienced significant anxiety and distress (Kuppusamy, 2022). The Circuit Breaker period in April 2020 and the uncertain backand-forth implementation of pandemic restrictions between 2021 and 2022 made daily life a tough and tumultuous challenge for PWDs. The ever-changing COVID-19 scene disrupted and hindered their direct access to everyday services and healthcare support needed to maintain their quality of life.

Before the onset of the COVID-19 pandemic in early 2020, preexisting systemic barriers had already largely excluded people with disabilities from the economic mainstream in Singapore (Zhuang, 2019). Although inclusive policies have improved significantly recently (Goh, 2020), the pandemic isolation aggravated the lack of accessible resources available for Singaporeans with disabilities (Yeo, 2020).

1.2.4 Inclusive Attitudes Survey

According to the Inclusive Attitudes Survey Part 1: Views of The General Public (Lien Foundation, 2016), only 30% of participants believed Singapore was an inclusive society for disabled children. 64% expressed that Singaporeans were willing to share public spaces with disabled children but not ready to interact with them, while 11% felt unwilling to be in public with them. 40% thought that Singaporeans were indifferent toward disabled children, and only 8% believed they would go the extra mile to make them feel welcome. Over a third of the participants surveyed did not have disabled children in their social circles. Lastly, 49% believed that newer legislation was required to improve disabled welfare, highlighting the significant need for more inclusive social policies.



1.2.5 National Policy

As of January 2023, national policy and legislation supporting the use of SEDs for the Blind and VI in public spaces still do not yet extend to other types of ADs, like Autism ADs for the Autistic, Hearing Dogs for the d/Deaf or Hard-of-Hearing, and Mobility ADs for Persons with Mobility Needs, except for a brief mention of people with "hearing impairment" in the Rapid Transit Systems Regulations Chapter 263A, Section 42, Regulation 8(1), (3). This permits d/Deaf or Hard-of-Hearing handlers to board the train with their ADs. However, access to buses and other public spaces such as cafés, eateries, and restaurants across the island is not legislated nor tested for Hearing Dogs and other types of ADs.

1.2.6 Public Access

The United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) Committee recommended that Singapore adopt a national accessibility strategy covering all areas in the Convention, including public transportation and using guide dogs and other service animals (18(a), Article 9). This was stated in the committee's concluding observations on Singapore's initial UNCRPD report in 2022. Service animals include various ADs who serve PWDs with and without Vision Impairments, including Autistic, the d/Deaf or Hard-of-Hearing, and Persons with Physical Disabilities. This report uses ADs and service dogs interchangeably, excluding other types of working dogs.

A decade ago, local media had already reported several instances where SED users and their ADs had not been granted entry into various public spaces, despite affirmative public access legal provisions for SEDs and their handlers found in the Environmental Public Health (Food Hygiene) Regulations, the Rapid Transit Systems Act, and the Road Traffic Act. These incidents occurred when they attempted to patronise certain food establishments (Tan, 2014) and retail outlets (Tan, 2013) and use public transportation (Ng, 2019). These incidents indicated how a lack of understanding from the service crew and the public resulted in access challenges for SED handlers. Unfortunately, more than a decade later, this trend shows no sign of abating, with other SED handlers experiencing similar public access difficulties with their ADs from as recently as March 2023 (Ong, 2022; Rashid, 2023; Raguraman, 2023a).

The authors hypothesise that these adverse public reactions towards SEDs and their users persist as the laws are neither definitive nor anti-discriminatory and depend upon the goodwill and understanding of building or retail management, service personnel and consumers. This highlights the challenges that lie ahead for future AD users in Singapore. Even if supportive legislations exist for other types of ADs for Singaporeans with physical disabilities, the d/Deaf or Hard-of-Hearing, and Autistic individuals, the general public lacks awareness of ADs and the legislation that protects them and their handlers will have to be addressed.

This, along with a recent commentary piece on Singapore Today Online (Zalizan, 2023) about ADs patronising food establishments, suggests that further advocacy and education are needed to improve Singaporeans' awareness and acceptance of ADs in public spaces and lighten the burden of individual AD handlers to educate every new establishment they visit. These will be further elaborated on and unpacked in later sections of this report.

2. Methodology

From October to December 2022, K9Assistance recruited 658 participants to participate in the second PPS. It sorted them into three groups based on method: Quantitative surveys for Group A and B's participants and qualitative focus group discussions for Group C's participants. A concerted effort was made to recruit them from different age groups, gender, and educational and racial backgrounds.

Appendices D, E, and F show the PPS participants' demographic breakdown. Groups A and B's participants had the incentive of being entered into a lucky draw where the top three prizes were \$200, \$300, and \$500 FairPrice vouchers. At the same time, Group C's participants were each mailed \$50 FairPrice vouchers to compensate for their time and travel costs to attend the Focus Group Discussions (FGDs).

2.1 Consideration of Demographic Factors: Racial and Ethnic Minority Participation

By and large, the PPS participants' demographic profile corresponds with Singapore's ethnic-racial composition. Regarding race, most of the total participants, averaging 80%, were Chinese, compared to 74% in the racial demographic of the Singapore population (Department of Statistics, 2022). Conversely, there were fewer Malay and Indian participants, particularly in Group C, although concerted efforts had been made to survey these racial and ethnic minority populations.

The proportion of Malay and Indian participants in the PPS is not dissimilar to the racial demographic of the Singapore population. About 7% of participants across all groups were Malay Singaporeans, compared to 13% of the local population (Department of Statistics, 2022). Similarly, about 6% of participants were Indian Singaporeans, compared to 9% overall (Department of Statistics, 2022). This shows that participant demographics remained similar to the racial demographics in Singapore.

2.2 Group A

The 302 participants in Group A answered a 13-question online survey (see Appendix A) and were recruited through private and group-based messages to friends of K9Assistance. Participants who responded to the survey through our initial outreach helped us recruit other participants by sharing the survey link we gave them with their personal contacts and social networks (Simkus, 2022). The survey and methodology of recruitment were the same as the first Public Perceptions Survey to ascertain the baselines and to understand if public sentiments on ADs changed between first and second PPS. The demographical distribution of Group A's participants is shown in Appendix D.

2.3 Group B

The 306 participants in Group B were shown a four-minute, 55-second educational video (see Appendix C) explaining what ADs are, how they are trained, the tasks they can perform, and their public behaviour. Participants were then invited to complete an identical survey in Group A. Group B's participants were recruited in person at the Great Bay Fiesta carnival as part of SG Cares Giving Week (MediaCorp, 2022). Visitors to the booth interacted with an AD and her disabled handler. They asked questions about how her AD empowered and enriched her life. Participants were also able to observe an AD's behaviour in public. The educational video and opportunity to interact with an AD were designed in this phase to measure the effectiveness of community advocacy and outreach efforts. The demographical distribution of Group B's participants is shown in Appendix E.

2.4 Group C

The views of 50 participants in Group C were engaged through one-hour FGDs. They were asked to share their answers to five questions on their acceptance and awareness of ADs (see Appendix B). Participants were recruited by disseminating the link to register for the FGDs through private and group-based messages to friends and followers of K9Assistance. Those recipients who participated in the FGDs also shared the link with their contacts, some of whom signed up. The design of the questions for Group C's participants and the format of the FGD was meant to allow participants to express their views in a more in-depth manner to find out if the sentiments collected were consistent with Group A and B and thoroughly study the themes that emerged from the open-ended discussions. The demographical distribution of Group C's participants is shown in Appendix F.

2.5 Limitations

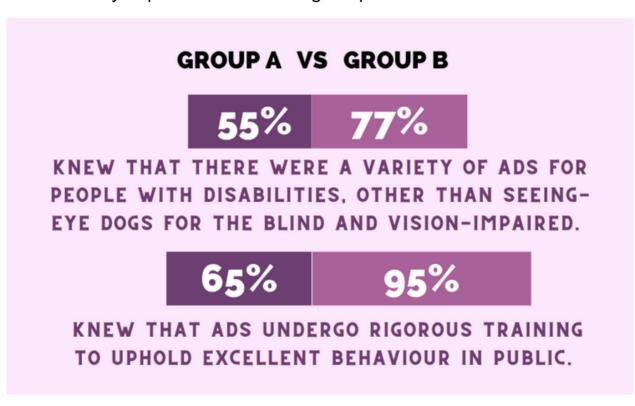
While the data from all three groups broadly shows favourable support for Singaporeans with disabilities, it must be understood within the constraints of the PPS methodology. The results depended on participants' honest self-reporting of their opinions, sentiments, and views on ADs. Hence, when examining the data, one must consider the risk of participants providing socially desirable responses rather than honest opinions, exposing the data to a certain level of bias in its findings (Nikolopoulou, 2022; Fisher, 1993). For example, the responses may be more positive or favourable on the issues related to ADs in Singapore than in fact or reality. Nevertheless, anonymous data collection for Group A and B and drawing from participants without prior ties to the research for Group C helped to mitigate this risk. Although the method used to gather participants for the PPS limits the representability of the data (see Section 2.1), it offers an objective, up-to-date insight into how the general population in Singapore perceives the public use and acceptance of ADs.

3. Findings

One of the most significant findings from the PPS is that Group B's participants showed a greater willingness to share public spaces with ADs than Group A's. Both groups' participants were asked if they would be willing to share the following public areas with ADs: Food establishments (e.g., hawker centres and restaurants), public spaces (e.g., cinemas, shopping malls and banks), and public transportation (e.g., trains and buses). The findings found that 73% of Group A's participants said they would be willing to share public spaces with ADs and their users in Singapore, unlike results from the 2021 Public Perceptions Survey (75%). 84% of Group B's participants expressed the same sentiments. This matches Group C's findings, where most participants were willing to share public spaces with them. Some of Group C's participants used even stronger language, stating that they would feel "touched" seeing a disabled handler with their AD in public and have "respect" for them and their empowering bond.

3.1 Factors Influencing Public Attitudes towards ADs: Group A and B

In Group A, only 55% of participants knew that there were a variety of ADs for people with varying disabilities, other than SEDs for the Blind and VI. In Group B, this number grew to 77%. Similarly, 65% of participants in Group A knew that ADs undergo rigorous training to uphold excellent behaviour in public. Meanwhile, in Group B, an overwhelming majority of 95% of participants were aware of this. These findings suggest that education emphasising comprehensive information about ADs and the heartfelt human stories behind the cause is a highly effective way to promote ADs among the public.



3.2 Possible Factors Affecting Attitudes Towards ADs in Public Places

The following reasons could explain the key differences and numerical disparity in the findings and trends noted in Group A and B's data-driven results.

3.2.1 Education and Age

Firstly, many of the participants in Group B recruited at the Great Bay Fiesta were younger and more educated. There is a significant decrease in reported concerns from Group A to B. In terms of age, Group A had a broader, even spread across all age groups, with most participants being 41 to 50 years old (29%). However, Group B comprised younger participants, with most being 21 to 30 years old (46%). 78% of Group A's participants received tertiary education or higher, compared to 90% of Group B's participants.

This difference could account for their increased willingness to have a more positive acceptance of and attitude towards ADs and their disabled handlers in public establishments. Thus, Group B's participants may have fewer concerns regarding ADs because, as younger and highly educated individuals, they might have already been exposed to more information about ADs from a younger age.

3.2.2 Enhancing Understanding Through Educational Video

Secondly, the educational video shown to Group B's participants before they completed their survey could further account for the difference in findings between Group A and B. The footage shown to Group B portrayed the activities of an AD team in relatable day-to-day situations, such as going to a restaurant and navigating through shopping malls. These scenes were accompanied by appealing infographics about ADs and statements by Singaporeans from various backgrounds expressing their support for ADs.

3.2.3 Impact of AD Education and Awareness Efforts

Thirdly, most of Group B's participants who responded at the Great Bay Fiesta had the opportunity to meet and interact with an AD team in person. They could immediately clarify and address potential questions the participants had on ADs who could witness for themselves the excellent training and behaviour of an AD and the meaningful impact that an AD has on the life of their disabled handler. These findings reveal that efforts to educate the public and raise awareness of ADs are an effective and necessary strategy for promoting the overall acceptance of ADs in Singapore.

3.3 Group C

3.3.1 Raising Awareness and Addressing Knowledge Gaps: The Need for Education on ADs

This need for improved education concerning AD use in Singapore emerged as a salient theme in Group C. Participants reflected that they did not know much about ADs, especially those for Autistic individuals, the d/Deaf or Hard-of-Hearing, and Persons with Physical Disabilities. Participants who knew this expressed concerns that other public members may have different awareness about ADs. They wanted to learn more about ADs and increase their understanding of them. Several participants also had further questions about the various types of ADs, their training, and how to interact appropriately with them in public places in Singapore. Participants generally understood that ADs play a significant role in helping and empowering their disabled handlers, so they sought further clarification on how ADs could perform these functions. The request for accurate and easily accessible educational resources on ADs suggests that the public is interested in, rather than resistant to, learning more about them and their users. This revealed a societal interest in welcoming ADs and their disabled handlers by learning to show respect towards and accommodate them when encountering them in public places within Singapore.

3.3.2 Increasing Acceptance and Inclusion: Personal Factors Shaping Attitudes Towards ADs in Public Places

Nevertheless, despite limited information, participants showed an overwhelming acceptance towards ADs and a willingness to share public places with them. This willingness was often a result of individual factors, such as personal connections to current ADs handlers, other PWDs, and professional involvement in the healthcare or social service sectors.

When participants had greater exposure to ADs, whether in person, via social media, or through education, they reported more acceptance towards them. Several reflected that they had never seen an AD in Singapore and would be curious and intrigued if so. This shows that the presence of ADs in public places, alongside education, can positively impact their overall acceptance, as public members would witness the positive effects of ADs, their practical training, and good behaviour. In the words of one participant, "Seeing is Believing". Accordingly, it is "better" for the social acceptance of ADs when people can see and understand them at work.

3.3.3 Promoting Acceptance and Empowerment: The Role of Government in Educating the Public on ADs

Moreover, participants in Group C also noted that the Government could play a significant role in promoting the acceptance of ADs through public education. In addition to the information and resources published by K9Assistance, educational broadcasts and campaigns from the Government could have a broader reach to more Singaporeans and positively impact the overall awareness of ADs here.

Some participants suggested putting up educational posters about ADs and how to interact with them in public places such as trains, buses and housing development blocks. This easily accessible information in highly populated areas would be beneficial in educating Singaporeans, even if they have never seen ADs for themselves. Other participants suggested launching general awareness campaigns through traditional or digital means and collaborating with organisations such as schools to promote awareness of ADs among youth.

Overall, Group C's findings indicate that educational support from the Government could meaningfully increase awareness of ADs and send a credence and powerful message that the public can support and empower Singaporeans with disabilities.

3.3.4 Balancing Concerns with Acceptance: Understanding Public Perceptions towards ADs in Shared Spaces

While most participants reflected positive and accepting sentiments, several concerns were raised about sharing public places with ADs. In Group A, the top three concerns were hygiene (14%), fear of dogs (11%) and smell (9%). In Group B, the top three concerns were hygiene (5%), fear of dogs (5%) and safety (3%). However, it is essential to note that while participants indicated these concerns, a substantial majority nonetheless reported that they supported the use of ADs despite these concerns.

The participants' willingness to support the use of ADs despite concerns about hygiene and fear of dogs could be attributed to various factors. As one participant mentioned, "public spaces should be for everyone," highlighting the importance of inclusion and accessibility for individuals with disabilities. Another participant stated, "ADs are like an extension of the handler's way of life." These quotes suggest that the participants had were aware of the crucial role that ADs play in assisting people with disabilities, and a desire to be inclusive towards AD teams. These beliefs could contribute towards their positive attitudes towards ADs and explain their willingness to reconsider their reservations.

Furthermore, the findings indicate that empathy may also play a role in shaping positive attitudes towards ADs. For example, one participant felt that they did not "see any harm in sharing space," showing a willingness to understand and accommodate the needs of others, including individuals with ADs. This suggests that while some apprehensions exist, the perceived benefits of ADs outweighed the concerns of most participants. These findings suggest that empathy and values of equality and inclusion are significant factors in shaping attitudes towards ADs, even in the face of concerns about hygiene and fear of dogs.

3.3.5 Group C's Concerns: Lack of Space for ADs in Singapore

In Group C, however, the main concern was the lack of space. Different rationales were given to substantiate this. The first reason some participants were concerned about the lack of space in Singapore was a consideration for the safety of ADs and their handlers. Some locations cited were crowded buses and trains during peak hours, gyms and small cafes and restaurants. In these spaces, participants were worried that ADs might be "distracted or overwhelmed" or perhaps even get stepped on in a very crowded space. The second reason some participants were concerned about the lack of space was the proximity to public members who might be afraid of or allergic to dogs. In response, one suggestion was to have some areas designated as animal-free while most spaces are AD-friendly. Public education would be hugely beneficial in response to Group C's concerns.

Through education, public members can learn that ADs are specially trained to navigate urban spaces, including narrow or crowded areas. What may appear to be a potentially unsafe situation to some, such as an AD riding an escalator, is perfectly safe, given the training ADs undergo. Nonetheless, the concerns raised by Group C may point to potential long-term possibilities in helping society to become more AD-friendly, such as considering the accessibility of the built environment for ADs and PWDs alike.

3.3.6 Group C's Perceived Concerns: Balancing Personal Comfort and Support for AD in Singapore

One of the most interesting and telling findings from the FGDs was that more than half of the concerns Group C participants raised were not tangible but perceived worries on behalf of others. For example, while a few participants raised their fear of dogs, only one said she feared them. However, she was still very open to sharing space with ADs, although she would keep some distance from them. In this respect, it is essential to consider what participants' responses reveal about their reservations compared to their articulation of concern for others. While it is important to consider people's expressions of their legitimate concerns, their articulation of reservations on behalf of others should be further examined and interrogated to better understand public concerns of ADs in Singapore.

3.4 Religious and Cultural Differences

While a majority of the participants in the survey were Chinese, many in this group expressed reservations about the presence of ADs in public places on behalf of Malay and Indian Singaporeans. This indicates a level of cultural awareness and sensitivity among the participants. However, it is crucial to consider the opinions and feedback provided by the Malay and Indian participants themselves to gain a more comprehensive understanding of their perspectives on this issue. This is important because it allows for a more accurate and representative portrayal of the views and concerns of different ethnic and cultural groups within Singapore. By taking into account the experiences and opinions of all groups, policymakers and organisations can develop more inclusive and practical strategies to promote the acceptance and integration of ADs in public places. Acknowledging and addressing any cultural barriers or concerns is crucial to ensuring ADs and their users can co-exist with all Singaporeans, regardless of their cultural or ethnic backgrounds.

3.4.1 Cultural Acceptance of ADs among Participants from Minority Ethnic Groups in Singapore

The survey results revealed that most Malay and Indian participants (97%) supported the daily use of ADs by PWDs, and a large percentage (74%) were willing to share all public places with ADs. These findings indicate a discrepancy in the perceived concerns that ethnic Chinese participants may have expressed on behalf of ethnic minorities in Singapore. Instead, they demonstrate that Singaporeans of all backgrounds are accepting of ADs and willing to learn more about them. These results suggest that cultural differences should not be viewed as an insurmountable barrier or challenge when using ADs in Singapore.

4. Recommendations

Although there has been significant progress in recent years - in terms of state legislation and businesses permitting SEDs on their premises, as demonstrated in this study and a TODAY Online commentary (Zalizan, 2023), the biggest challenge is the public awareness and perception of how ADs behave in public and how they assist PWDs (i.e., the difference they make in a PWD's life).

Furthermore, public and private establishments care most about what the general public and their consumers think. If the latter is okay with sharing spaces with ADs, these establishments will be more inclusive (Taubert, Jongsma & Cox, 2017). For K9Assistance to succeed in its mission to start providing ADs for PWDs from the end of 2024 onwards, further efforts in public education are essential. We have developed three recommendations from the data gathered (see Appendix G).

4.1 Continuous education for all generations

Firstly, educational campaigns in partnership with or from the Government could have a broader reach to more Singaporeans and positively impact overall public awareness as this would help members of the public know that ADs are not pets and the public access restrictions for pets do not apply to ADs. One participant from Group A commented, "There seems to be a lack of clarity around rules governing Assistance Dogs". Another participant from Group B commented, "Will need to incorporate the education since preschool".

4.2 Seeing is Believing

Secondly, more face-to-face outreach efforts like what Group B's participants were exposed to at the Great Bay Fiesta would have a higher chance of gaining acceptance than more static material like social media. One participant from Group A mentioned the "Do more awareness program". Another Group B participant said, "Great awareness and public education can dispel prejudices".

4.3 Breaking barriers: Need for legislation to support ADs in public places

Thirdly, the push for acceptance of ADs in public places may require supportive legislation that would signal what would be the right thing to do to those not in favour of public access to ADs. Our findings suggest that many participants support PWDs using ADs – Group A (91.7%) and Group B (99.6%). Furthermore, as recommended by the UNCRPD, Singapore should adopt a national accessibility strategy that covers all areas included in the Convention, including public transportation and encompasses the use of guide dogs and other service animals in public places. However, AD users' daily negative experiences in Singapore did not correlate with our findings (Raguraman, 2023b).

This suggests that there will always be a small segment of the population who remain resistant to including AD users and their service animals. Not being able to have ADs facilitate them in their day-to-day activities also prevents their disabled handlers from leading independent and meaningful lives, which further excludes them from mainstream society. The burden of educating each establishment lies on individual AD users, as there is no legislative protection for them in Singapore.

Continually denying access to ADs in Singapore is not a sustainable practice in the long term, as users of these dogs are human and may experience frustration or become reactive after repeated rejections in a short period (Raguraman, 2023a). This suggests that Singapore requires more effective public access legislation to enable PWDs who need ADs to use them across the island nation.

5. Conclusion and Implications

Overall, the PPS results indicate high support for PWDs using ADs. Using quantitative surveys for Group A and B and qualitative FGDs for Group C, the findings are consistent in that most participants are willing to share public places with ADs and their disabled handlers. Group C's participants reflected their positive sentiments towards ADs.

The main methodological distinction was including an educational video in Group B's survey, shown before participants completed it, which was not included in Group A's. This may be one factor in the increased positive response from Group B's participants compared to Group A's, as participants could see how well-trained and important ADs are for their users with disabilities. Other factors contributing to this differential include Group B's participants' age and educational demographics and the context in which the surveys were conducted. Some concerns raised by participants regarding the use of ADs include hygiene, safety, fear of dogs and religious differences. However, many of those reported by participants were perceived concerns about how others might react to ADs rather than concrete fears. This was evident in Group C's findings, indicating a need to emphasise the real sentiments of Singaporeans of all backgrounds over the hypothetical fears some may project onto others. Further, as seen in the March 2023 viral incident concerning a SED handler's negative experience patronising a food establishment and the public's response (Zalizan, 2023), it appeared that our findings of conceived concerns for others when refusing access to ADs is a reality.

Based on the findings, the recommendations are (1) Educational campaigns emphasising the relatability and representation of ADs and their disabled handlers, (2) Increase face-to-face outreach efforts to advocate for PWDs through ADs, and (3) Collaboration with the Government to increase outreach and for supportive legislations towards the use of ADs in public places. These efforts would meet the need for more accurate and easily accessible information about ADs.

Some areas that participants were keen on learning more about included (1) the different types of ADs used by PWDs, (2) their specific training, (3) the excellent behaviour that ADs uphold in public and (4) Singapore's current legislation and policy towards ADs. Educational resources would allow Singaporeans to put a human face to the issue of ADs, demonstrating the empowering impact ADs have on the lives of PWDs.

In sum, social acceptance comes from greater understanding. Improving access to public education on ADs is crucial for K9Assistance to promote their use and acceptance in Singapore. Results from the PPS demonstrated the public's openness, understanding and support towards PWDs using ADs. Building upon the first Public Perceptions Survey, it is encouraging to note in this updated study that on-the-ground support is gaining traction as more Singaporeans become aware of ADs and their value for their disabled handlers. Moving forward, collaboration with the Government and enhancements made to educational campaigns and legislative protection on ADs will enable K9Assistance to continue advocating for them for PWDs here.

At K9Assistance, we hope Singapore will one day be a caring and inclusive society that embraces and welcomes ADs and their Singaporean handlers with disabilities.

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Appendices

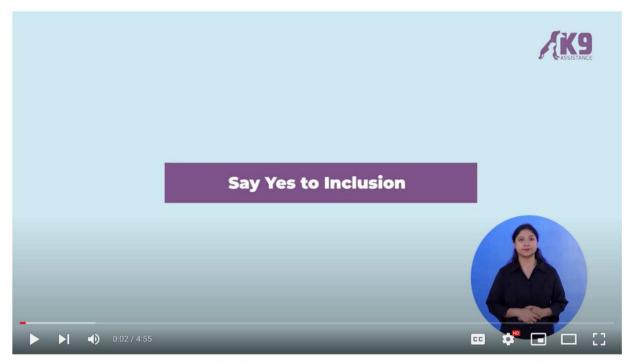
Appendix A: List of Questions for both Group A and B participants

S/N	Questions
1	Gender
2	Age
3	Race
4	Education
5	Are you a Person with Disability?
6	Do you know that besides guide dogs for the vision impaired, other types of Assistance Dogs are trained to help persons with different types of disabilities?
7	Do you know that Assistance Dogs are specially trained working dogs to help their disabled handlers with their daily activities and lessen challenges posed by their disabilities?
8	Do you know that Assistance Dogs are often identified by a harness, vest or jacket with the name and logo of their organisation?
9	Do you know that Assistance Dogs have to go through stringent training and testing to uphold excellent behaviour in public?
10	Now that you know more about Assistance Dogs, would you be more willing to share the following with them? If yes, please check those that apply below:
11	Are you supportive towards Persons with Disabilities using Assistance Dogs in their day-to-day lives?
12	Is there anything that is stopping you from accepting Assistance Dogs in public places, as mentioned above? If yes, please check on those that apply below:
13	Do you have any further comments about Assistance Dogs? If yes, please indicate below.

Appendix B: List of Questions for Group C participants

S/N	Questions
1	What do you know about Assistance Dogs?
2	What is your impression of ADs and their handlers when you see
	them in public places?
3	Would you be willing to share public spaces (like your favourite
	cafe or restaurant) and facilities (like gyms and bus stops) with
	ADs and their handlers? Why or why not?
4	Are there any public spaces or facilities that you will be
	concerned about sharing with ADs? What are your concerns
	about the use of ADs in these public places? Why?
5	What information would you like to help you find out more about
	Assistance Dogs?

Appendix C: Educational video shown to Group B's participants



K9Assistance Corporate Video (Say YES to Inclusion! | Assistance Dogs for Persons with Disabilities)

Appendix D: Demographics of Group A participants

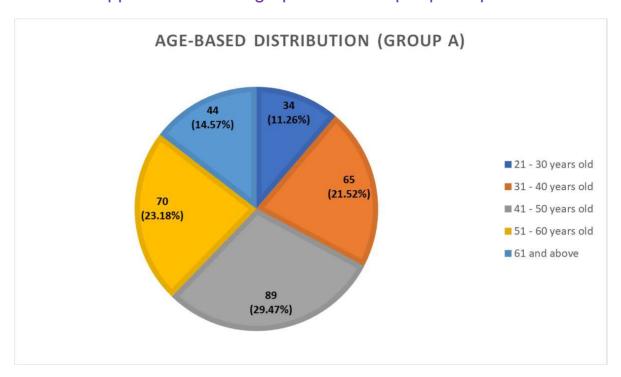


Figure 1: Group A Distribution by Age

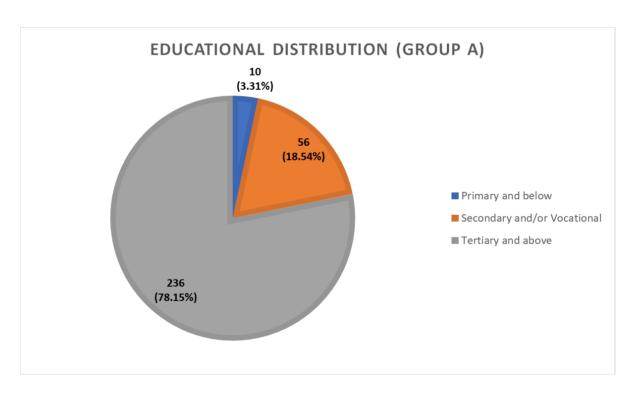


Figure 2: Group A Distribution by Education

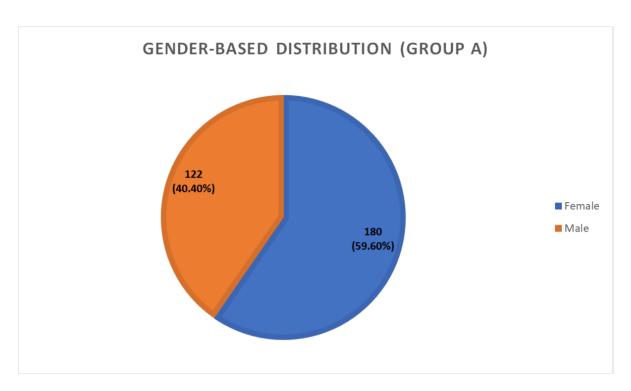


Figure 3: Group A Distribution by Gender

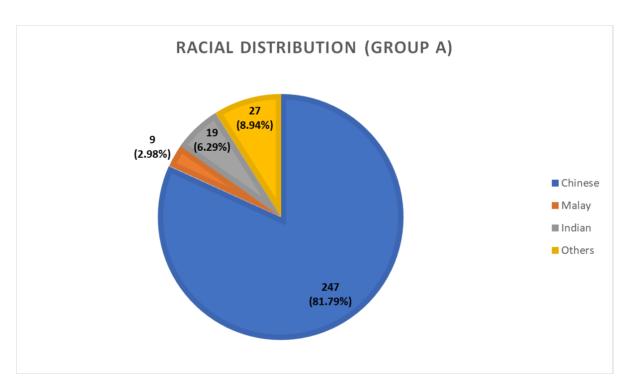


Figure 4: Group A Distribution by Race

Appendix E: Demographics of Group B participants

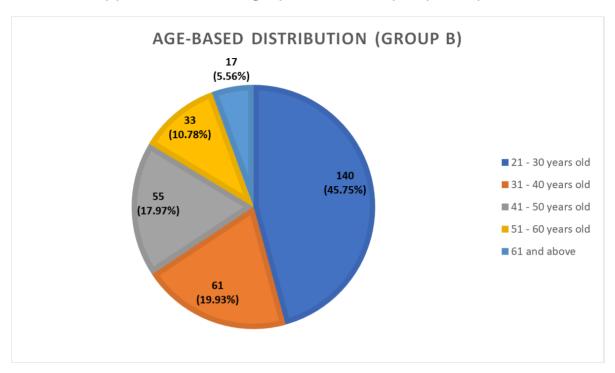


Figure 5: Group B Distribution by Age

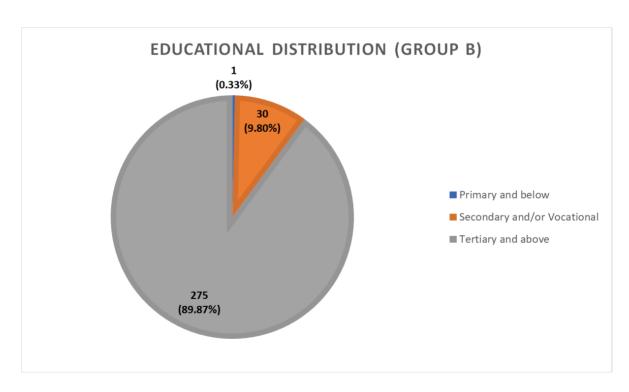


Figure 6: Group B Distribution by Education

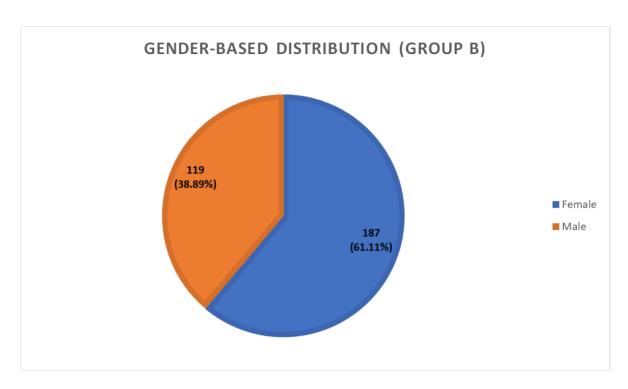


Figure 7: Group B Distribution by Gender

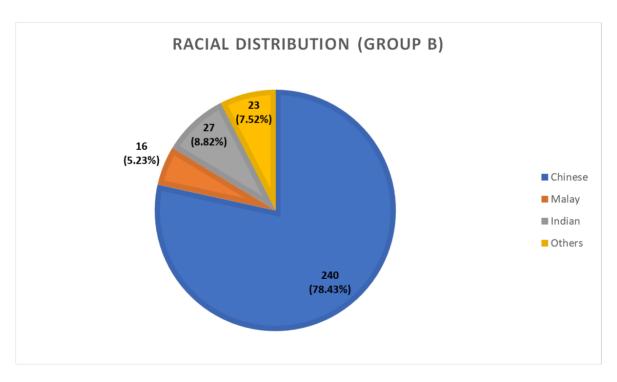


Figure 8: Group B Distribution by Race

Appendix F: Demographics of Group C participants

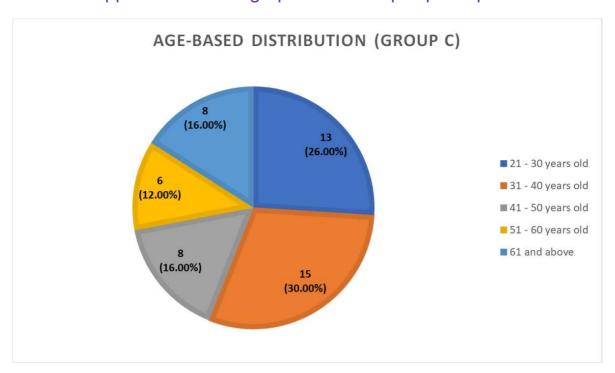


Figure 9: Group C Distribution by Age

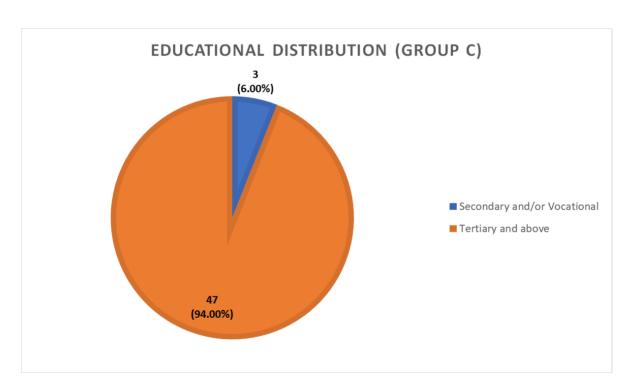


Figure 10: Group C Distribution by Education

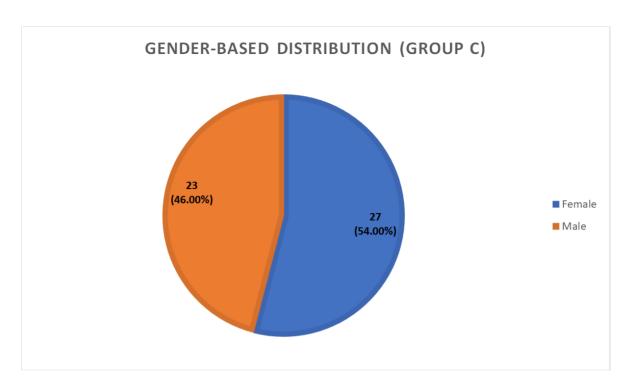


Figure 11: Group C Distribution by Gender

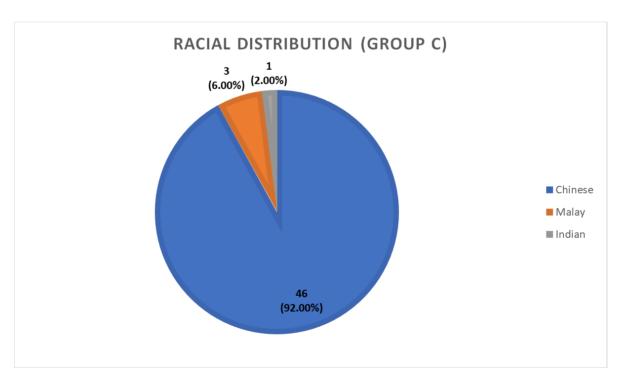


Figure 12: Group C Distribution by Race

Appendix G: Recommendations Table



FINDINGS

Participants might not be comfortable with ADs for a variety of reasons (i.e., religion, fear, allergies) and don't know how to react when seeing an AD

"Public needs to be aware and taught how to treat Assistance Dogs (ADs)"

"Addressing concerns of the population who have a fear for dogs or animals by providing guidance or advice"

"More education from government, national television, radios, and papers"

"Government to create more awareness of ADs, and educating the public so as to increase public acceptance"

RECOMMENDATIONS

Educational campaigns or programmes in partnership with or from the Government



Participants were concerned about the safety of ADs, and how ADs are in reality, seeing is believing.

"There should be more outreach programs on ADs"

"More advocacy for supporting the PwDs through ADs is needed"

"Having no impression of what Assistance Dogs are"

"Unsure of how Assistance Dogs might react in different situations"

Having more faceto-face outreach efforts in advocating for PWDs through ADs



Participants seek stronger regulations and clear guidelines on the use of Assistance <u>Dogs in public spaces</u>

"Government should mandate that ADs be allowed in public for PWDs"

"There seems to be a lack of clarity around rules governing Assistance Dogs"

"Government agencies that permit or facilitate the use of ADs have an onus to educate the general public"

Supportive legislations towards the use of ADs in public places



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