



Acceptance of Service Dogs for People with Disabilities at Airports around the World

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博 士 論 文

Acceptance of Service Dogs for People with Disabilities at Airports around the World

(世界の空港における身体障害者補助犬の受け入れ状況)

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Original Article

Title: Acceptance of Service Dogs for People with Disabilities at Airports around the World

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Abstract

Purpose: Airports are an essential part of aviation infrastructure and are meant to be used by a wide variety of people, including people with physical disabilities. With an increasing number of people traveling with their service dogs, airports must be adapted to accommodate these animals. However, there is limited research regarding the acceptance of service dogs at airports.

Method: A survey was administered to airports between July 2021 and April 2022 regarding the acceptance of service dogs at their facilities.

Results: We found that 71.2% of the airports that were surveyed accepted service dogs. Furthermore, 40.9% of such airports were equipped with toilets for service dogs. Most airports with toilets for service dogs were located in North America (92.2%). The acceptance rate of service dogs at airports around the world varies by region. While most airports provide information about their service dog policy on their websites, several do not.

Conclusion: Approximately 70% of airports around the world accept service dogs. More information about the acceptance of service dogs should be displayed on airports' websites.

Keywords: service dogs, toilets for service dogs, airport, barrier-free

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Introduction

Airports are an essential part of aviation infrastructure and meant to be used by a wide variety of people, including people with disabilities. Today, airport designs are changing in line with social requirements, such as traffic conditions and global events.

The Tokyo 2020 accessibility guidelines¹⁾ were created to ensure accessibility for everyone at the Tokyo Olympic and Paralympic Games held in Japan in 2021, regardless of physical impairments. Increasingly, public facilities, such as airports, are being designed using the universal design concept. In 2017, in preparation for the Tokyo Olympic and Paralympic Games, the Universal Design 2020 Action Plan²⁾ was approved by the cabinet. Through improvements in hardware and software, Japanese airports and airlines work together to provide appropriate barrier-free access based on their respective roles³⁾.

Service dogs allow people with disabilities to live their lives independently and help them indulge in a wider range of activities, which they would otherwise be unable to without human assistance. Consequently, many service dog users travel domestically and overseas with their dogs. Therefore, airports must provide an environment that is suitable for service dogs and people with disabilities.

Although many surveys⁴⁾ have been conducted to examine airlines' response to service dog users, no survey has targeted airports thus far. Therefore, this study aimed to clarify the acceptance of service dogs at airports around the world through a survey. The findings of the survey may help improve the facilities provided for service dogs and their users at airports, thereby

allowing them to travel more easily and comfortably.

Methods

A survey regarding the status of service dog acceptance at airports around the world was conducted from July 2021 to April 2022. Additional confirmatory surveys were conducted in November 2024, because it was revealed that 60 facilities were unintentionally omitted from the list of survey targets during the process of revising the paper.

First, using the Google search engine, we selected 824 major airports from 3,526 civilian airports globally for the survey⁵⁾, including 380 in Europe, 167 in North America, 97 in Asia, 67 in Central and South America, 59 in Africa, 28 in Oceania, and 26 in the Middle East. Major airports were defined as those named “international,” likely to have periodical international passenger flights or those providing English versions of their official websites. Airports without webpages in English language or those without official websites were excluded from the study. We sent a total of 1,300 survey requests, including inquiries made through multiple modes to the same facility; 472 requests were sent via an inquiry form, 514 via email, and 314 via post. The responses were collected via a Google survey form or email. In addition, for the airports that did not respond to the request, we collected information on the questionnaire items from their website posts.

There were 14 items on the questionnaire: seven items on basic information regarding the airport and seven items regarding the status of service dog acceptance (Table 1). To analyze the questionnaire items, we performed Fisher’s exact test for $m \times n$ contingency tables using Statcel4, an Excel add-

in application(OMS Publishing, Japan).

Results

The data on service dog acceptance at airports were collected from 323 airports (analytical rate: 39.2%); 80 were collected via the Google survey form or by email (response rate: 9.7%) and 243 were collected from airport websites. In terms of the location of these airports, 130 were in Europe, 116 in North America, 36 in Asia, 28 in Central and South America, 10 in Oceania, 2 in the Middle East, and 1 in Africa. For the rest of 501 airports, no data were collected either via Google Survey, email, or on the website.

We found that 230 (71.2%) of the 323 airports accepted service dogs. In terms of the location of such airports, 84 were in Europe (64.6%), 101 in North America (87.1%), 26 in Asia (72.2%), 9 in Central and South America (32.1%), 8 in Oceania (80.0%), 1 in the Middle East (50.0%), and 1 in Africa (100.0%) (Figure 1). In addition, we found that 4 airports in Europe, 2 in Asia, and 1 in the Middle East do not accept service dogs.

Furthermore, we found that 132 airports have a toilet for service dogs. In terms of the location of these airports, 12 were in Europe (9.2%), 107 in North America (92.2%), 6 in Asia (16.7%), 1 in Central and South America (3.6%), 4 in Oceania (40.0%), 1 in the Middle East (50.0%), and 1 in Africa (100.0%) (Figure 2). In terms of the installation location of toilets for service dogs, 23 airports reported installing them indoors, 29 outdoors, and 73 both indoors and outdoors; 7 did not specify the location.

Of the 73 airports with both indoor and outdoor toilets for service dogs, 5 were in Europe, 64 in North America, 2 in Asia, and 1 in Oceania, and 1 in

Central and South America.

Furthermore, we found that airports in North America have the highest rate of service dog acceptance (87.1%) and toilets for service dogs (92.2%). However, in Europe, although 64.6% of airports accepted service dogs, only 9.2% had toilets for them.

Regarding the posting of information about policy on service dogs on airport websites, 236 airports (73.1%) posted such information; 90 of these airports were located in Europe (69.2%), 97 in North America (83.6%), 11 in Asia (30.6%), 26 in Central and South America (92.9%), 10 in Oceania (100.0%), 1 in the Middle East (50.0%), and 1 in Africa (100.0%) .

Discussion

We obtained the data from around 40% of all the objects. Although approximately 70% of the airports analyzed accept service dogs, there are considerable regional differences in their acceptance rate. Similarly, we found considerable regional differences in the provision of toilets for service dogs. The acceptance rate of service dogs was higher in North America and Europe than in other regions, while the availability of toilets for service dogs was by far the best in North America.

The International Civil Aviation Organization (ICAO) has specified standards to facilitate the mobility of the elderly and people with disabilities for its member states⁶); however, despite these standards, service dog acceptance rate differs by region. If the ICAO were to set acceptance standards for service dogs, then it may help member states to prepare such arrangements.

The Manual on Access to Air Transport by Persons with Disabilities (Doc 9984; 2013, ICAO)⁷⁾ issued by the ICAO recommends that airport operators set aside areas for service animals to relieve themselves. Therefore, airports must provide toilets for service dogs regardless of the region they are located in.

Moreover, approximately 70% of airports were found to present information about policy on service dogs on their websites, while below 10% were in Africa and the Middle East.

Airports should clarify their policy on service dogs and provide this information on their respective websites in an easily accessible and comprehensible manner; this would ensure a smooth travel experience for people traveling with service dogs.

A report on the behavior of visually impaired individuals at airports states that such people restrict their movements to avoid getting lost⁸⁾. We conducted interviews with people who traveled abroad with service dogs and found that the main problems they face are finding an appropriate place for their service dogs to relieve themselves and restricting the dog's fluid intake⁹⁾. Because of the lack of information, people with disabilities end up restricting their own movements. Similarly, service dog users restrict their dog's fluid intake as a precaution if they cannot find a suitable place for the dog's needs. Franke et al.¹⁰⁾ revealed that it is challenging for service and emotional support animal handlers to find a place for the animals to relieve themselves at airports. They stated that improving the design of relieving areas at airports and training airport staff to accommodate service dog handlers are necessary steps to address the aforementioned problems¹⁰⁾. It is

possible that travelers with service dogs may have to wait at an airport for several hours during entry or exit procedures; hence, it is crucial to provide toilets for service dogs. Access to information about the availability and location of such spaces would contribute to travelers' peace of mind and dogs' health. Franke et al.¹⁰⁾ also emphasized the importance of ensuring consistency between the policies of airports and airlines regarding service dogs. Thus, it is essential to create an environment where airports and airlines collaborate with each other to provide smooth, seamless support for people traveling with service dogs, which includes improvements in hardware and software.

Limitations

This study has the following limitations. First, as the survey was conducted after the start of the Russia–Ukraine war, survey requests could not be sent to Ukraine because of the suspension of international mail services. Second, the administration of the survey was affected by the outbreak of the COVID-19 pandemic. Third, the online form used for the survey was inaccessible in some regions, such as China. Last, airports in the Middle East and Africa had a lower response rate than those in other regions. The low response rate in these regions may be correlated with low interest in service dogs or low levels of social welfare. These factors may have affected the survey results.

Conclusion

In this study, we found that there are considerable regional differences in the acceptance of service dogs at airports worldwide and the ease with which

this information can be collected from their websites. Airports should upgrade their facilities to become more accessible for people traveling with service dogs and provide information about their service dog acceptance policy on their websites. Doing so will ensure that people traveling with service dogs can access the necessary information smoothly and seamlessly.

Acknowledgement

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Table 1. Survey items

Figure legends

Figure 1. Regional differences in the acceptance of service dogs at airports
The numbers to the right of the bars indicate the total number of airports in

each region analyzed in the survey. The numbers in the dark gray bars indicate the number of airports that accept service dogs, those in the light gray bars indicate the number of airports that do not accept service dogs, and those in the white bars indicate the number of airports with unspecified policy. The numbers in parentheses indicate the percentages in each region.

Figure 2. Regional differences in the availability of toilets for service dogs at airports

The numbers to the right of the bars indicate the total number of airports in each region analyzed in the survey. The numbers in the dark gray bars indicate the number of airports with toilets available for service dogs, those in the light gray bars indicate the number of airports that do not have toilets for service dogs, and those in the white bars indicate the number of airports of which status is unknown. The numbers in parentheses indicate the percentages in each region.

Basic airport information	Conditions for service dogs
The International Air Transport Association (IATA) airport code	Status of accepting service dogs in public areas
International flight status	Presence of toilets for service dogs
Number of airlines with scheduled flights in 2019	Location of the toilets for service dogs when available (outdoor, indoor, or both)
Number of air passengers passing through the airport in 2019	Service dog information (accessibility, boarding procedures, and etc.) posted on website
Number of flights from and to the airport in 2019	Presence of signage indicating that service dogs are allowed
Airport operator	Presence of periodical education for airport workers concerning service dogs
Airport website URL	Inquiries about service dogs from passengers or visitors

Table 1. Survey items

Regions

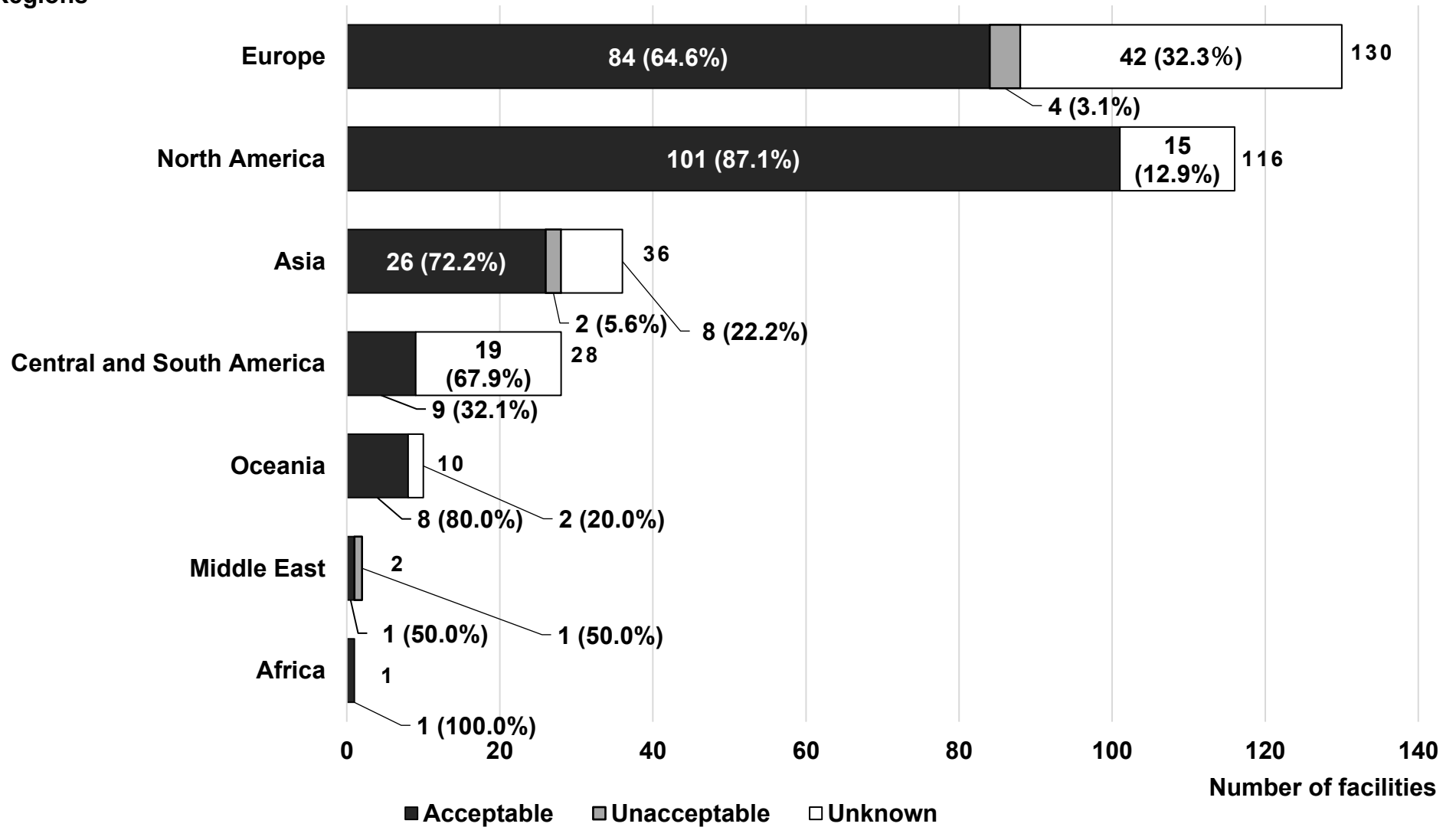


Figure 1. Regional differences in acceptance of service dogs at airports

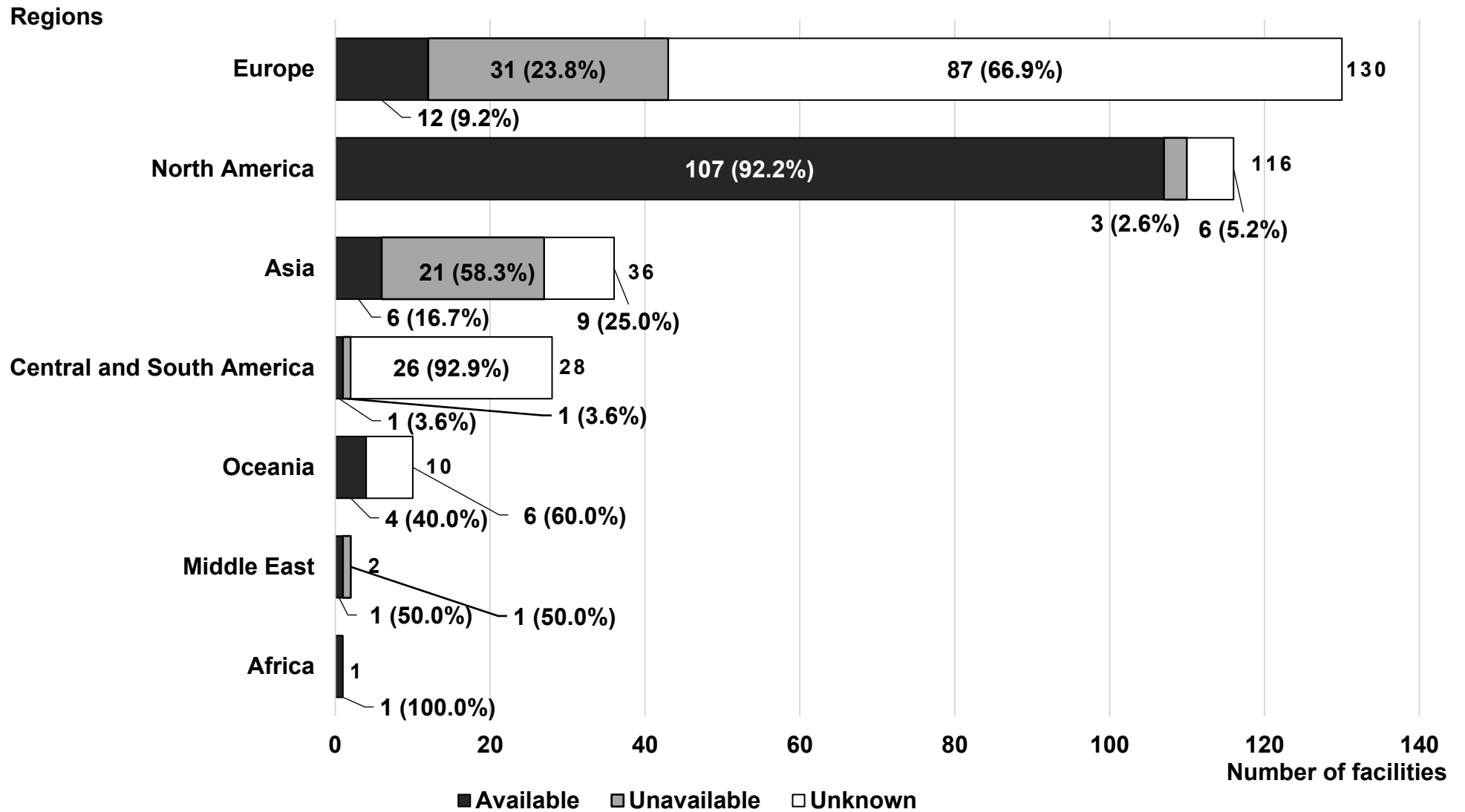


Figure 2. Regional differences in the availability of toilets for service dogs at airports