Humanities, Arts and Social Sciences Studies

Research Article

Humanities, Arts and Social Sciences Studies
https://so02.tci-thaijo.org/index.php/hasss
ISSN (Online): 2630-0079

YOUTH ACCEPTANCE AND CHALLENGES IN EXPANDING SHARED MOBILITY IN JAPAN: A CASE STUDY OF SAPPORO, HOKKAIDO

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ABSTRACT

Shared mobility services, including ride-hailing and carpooling, are attracting growing attention in Japan as alternatives to challenges such as population decline, taxi driver shortages, and ageing transport infrastructure. In April 2024, the Japanese government partially relaxed regulations on paid ride services to alleviate urban taxi shortages. However, institutional rigidity, socio-cultural resistance, and a fragmented infrastructure continue to impede widespread adoption. While platform-based mobility is expanding globally, uptake in Japan remains limited due to entrenched institutional and cultural barriers. Young people are expected to play a vital role as future users and providers of shared mobility services. Yet empirical research on their perceptions and acceptance remains scarce, hindering the development of sustainable and inclusive transport policies. This study investigates how youth aged 18 to 29 in Sapporo, Hokkaido, understand and engage with shared mobility through in-depth interviews of 18 participants. Through thematic analysis, the following four factors emerged as elements influencing acceptance: (a) the underdevelopment of services in terms of institution building and visibility; (b) differentiation from well-developed existing services; (c) necessity of proper matching of shared activities and specific national characteristics; and (d) understanding the social diffusion mechanisms behind service adoption. These findings suggest that youth engagement is not merely about convenience or cost but reflects deeper institutional and sociocultural dynamics. Although digitally literate and open to new technologies, young people remain cautious due to concerns over legal ambiguity, social norms, and expectations around service quality. Drawing on insights from a non-metropolitan context, this study repositions youth as co-creators rather than passive users of mobility systems. It argues that shared mobility in Japan should be reconceptualised as part of the broader social infrastructure, requiring institutional innovation, regulatory flexibility, and participatory governance grounded in the notion of social common capital.

Keywords: Shared mobility; ride-hailing; youth; Japan; Sapporo; Hokkaido

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Received: *26 November 2024*
Revised: *2 July 2025*
Accepted: *7 July 2025*
Published: *15 September 2025*

Citation:
Uchiyama, Y. (2025). Youth acceptance and challenges in expanding shared mobility in Japan: A case study of Sapporo, Hokkaido. Humanities, Arts and Social Sciences Studies, 25(3), 594–605. https://doi.org/10.69598/hasss.25.3.273944

1. INTRODUCTION

In Japan, various sharing economy-related businesses have been growing as the value of consumer markets and idle assets is reassessed. The size of the sharing economy market in Japan in 2021 was recorded at 2,419.8 billion JPY and is expected to grow to 14,279.9 billion JPY by 2030 (Sharing Economy Association, 2022). Particularly, shared mobility is globally recognised as an efficient means of using mobile resources to approach social and environmental problems caused mainly by air pollution, traffic congestion and oil shortages (Castellanos et al., 2021; Machado et al., 2018). The term "shared mobility" broadly refers to the short-term shared use of motorised transport services made possible through digital platforms, encompassing both ride sharing and carpooling (Guyader et al., 2021). Ride-hailing refers to fee-based on-demand services such as Uber (Shaheen, 2018), whilst carpooling refers to the act of individual drivers sharing empty seats with passengers travelling in the same direction, typically without the aim of profit (Aguiléra & Pigalle, 2021; Dewan & Ahmad, 2007; Olsson et al., 2019). Although prior literature tends to conflate these services with ridesharing, ridesharing concretely refers to trips involving at least two or more travellers of similar origins and destinations sharing a vehicle and trip costs (Aguiléra & Pigalle, 2021; Dewan & Ahmad, 2007; Furuhata et al., 2013; Neoh et al., 2017; Olsson et al., 2019).

Private vehicle paid passenger ride-hailing services have traditionally been restricted in Japan due to Road Transportation Act regulations and pressure from existing forces. Conversely, carpooling has not been sufficiently popular due to low profitability (Altura et al., 2021; Mobility Transportation, 2019). However, discussions on lifting the ban were rekindled within the ruling and opposition parties after Yoshihide Suga, former Prime Minister of the Liberal Democratic Party in 2023, argued the need to promote the spread of ride-hailing to compensate for the shortage of urban taxis due to inbound demand (Junior Chamber International Nagano, 2023). As a result, the Government decided to conditionally lift the ban on ride-hailing temporarily in April 2024 (Fujimoto, 2023). However, the main purpose of this partial ban lifting is to increase door-to-door traffic at times when taxis are in short supply in urban areas. Therefore, the taxi companies are responsible for operation and driver management, and the pricing is equivalent to conventional taxis. Although the Government initially called for a pilot introduction to decide on a full ban by June 2024, as of October 2024, there has been no progressive discussion concerning the full ban. The target area has gradually expanded from the initially limited area of 4 prefectures/cities (Tokyo, Kanagawa, Nagoya, and Kyoto city areas) to the main areas of 21 prefectures as of August 2024 (Jido Unten Labo, 2024).

According to the Japan Federation of Hire-Taxi Associations, the number of taxi drivers in Japan peaked at 267,802 in 2006 and has continued to decline, falling to 207,016 in 2020. This is due to the high average age of taxi drivers (men: 59 years; women: 45 years), as the job is a second career option (Japan Federation of Hire-Taxi Associations, 2022). The revised regulations abolished the geography test required for the Type 2 (taxi licence) examination and started applying the test in 20 languages to accommodate more foreign drivers. However, the taxi industry still faces an ageing driver population and the necessity for developing strategies for attracting young drivers as key issues for the sector's sustainability. Importantly, the potential contributions of youths have been largely ignored in policy and academic discussions on shared mobility. As of 2024, Japan's ageing rate has reached 29.1%, and in 2023, 51.5% of the country's population lives in depopulated areas. Severe population decline has accelerated migration from rural to urban areas, leading to increased transportation demands and supply pressures. Concurrently, government promotion policies have led to a surge in inbound tourism, further exacerbating existing transportation shortages. Against this backdrop, there is a growing recognition of the need to develop new, sustainable, and inclusive mobility solutions.

One example of this is the emergence of ride-sharing services operated through digital platforms. Unlike traditional taxi businesses, these services do not rely on rigid employment structures or licensing systems and may lower barriers to entry for young people. Additionally, their digital infrastructure aligns with the skills and usage habits of the so-called "digital native" generation. Despite concrete signs of driver shortages rooted in social, geographical, and institutional factors, the role of young people as both service users and providers has not been sufficiently explored. The active participation of young people in the spread of ride-sharing services could play a vital role in building public acceptance and operational capacity. However, compared to other countries where shared mobility is widely adopted, in Japan, it is still rare to ride in someone else's car outside of public transportation operated by local governments or licensed operators. In this context, particularly amid ongoing tensions between national regulatory authorities and the taxi industry, there remains a gap in understanding regarding the entities responsible for promoting the adoption and expansion of such services. Furthermore, little empirical research exists concerning how young people perceive, engage with, or are willing to participate in shared mobility systems.

Therefore, this study conducted a detailed analysis of the acceptability of young people in the provision and use of shared mobility services, particularly ride-hailing, whilst considering the consistency with barriers to the diffusion of mobility services. Based on a qualitative research approach, in-depth interviews were conducted with 18 Japanese young participants living in Sapporo City, Hokkaido to investigate their actual situation, use and intentions towards shared mobility services. This study explores in-depth findings on the acceptability of shared mobility services among young people aged 18–29 who can drive a private car and is analysed by thematic analysis.

This study serves as a benchmark for addressing the lack of empirical research on youth's acceptance of ride-hailing, particularly in terms of the adoption and sustainability of shared mobility in Japan. In addition, this would be the first study to qualitatively assess the potential contribution of young people to market dynamics in door-to-door transport issues in Japan, which are caught between a complex regulatory landscape and social issues. The Sapporo Transport Region is one of the cities where ride-hailing operations have been authorised on a limited basis, but which follows social transport issues in Japan, such as its transport structure, the ageing of the sector and the depopulation of approximately 85% of Hokkaido. This regional perspective provides insight into the transport needs and challenges in non-metropolitan areas and expects to serve as a benchmark model for other similar regions.

2. SHARED MOBILITY IN JAPAN

Unlike general discussions of the sharing economy that focus on economic efficiency (Fors et al., 2021; Majima et al., 2021), shared mobility mainly refers to technology-enabled services aimed at addressing social and environmental issues such as traffic congestion and emissions (Castellanos et al., 2021; Fujisaki et al., 2022; Machado et al., 2018). Shared mobility is incorporated in the context of public-private partnerships, technology-driven combinations of multiple mobility services, and Mobility as a Service (MaaS), which is a regional mobility solution in conjunction with non-transport medical and tourism services (Butler et al., 2021; Mulley et al., 2023).

Previous studies have suggested that the introduction of ride-hailing and carpooling in urban areas can lead to the reduction of carbon emissions and copper consumption and savings in travel distance (Kawaguchi et al., 2019; Zhang et al., 2020). In Japan, most consumers of shared mobility are male and primarily driven by economic and practical considerations. However, they tend to favour low-risk options such as fixed-route or operator-managed services, since peer-to-peer models are often perceived as more uncertain (Abe, 2017). From the perspective of potential drivers, especially private car owners, participation in shared mobility services require more than just financial incentives. Emotional motivations such as a sense of convenience, social approval, or personal satisfaction are often necessary to offset concerns rooted in risk aversion and the lack of clear institutional support (Ikezoe et al., 2020).

Shared mobility in Japan is regulated by the Road Transportation Act, which is a barrier to the development of ride-hailing services such as Uber (Watanabe et al., 2017). Whilst this is regarded as a violation of the law and problematic by the existing taxi industry, trade unions and the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) (Altura et al., 2021), the decision is more about protecting existing forces than the actual intentions of users and local conditions. However, shared mobility is also considered as a means to address diverse local issues, such as the lack of human resources and assets, in conjunction with digital platforms (Miyasaka & Hihara, 2021).

As a result, previous research suggests a lack of studies referring to the potential use of users under the context of shared mobility, including ride-hailing and carpooling, and the need for a diverse perspective that is not only economic, taking into account the advantages and disadvantages of actual potential users.

3. METHODOLOGY

This study applies a qualitative case study design under the inductive research approach (Saunders et al., 2019). It collects data through in-depth interviews from respondents in the case of Sapporo City, the prefectural capital of Hokkaido, Japan (Figure 1). In Hokkaido, ride-hailing started to be offered in the Sapporo traffic area (Sapporo, Ebetsu, Kitahiroshima, and Ishikari cities (excluding the Atsuta and Hamamasu areas)) on weekend nights beginning from June 2024 (Orita, 2024). Sapporo is a suitable case for this study in that, despite being a large city with a population of approximately 1.96 million as of September 2024, door-to-door transport is essential due to the low birthrate and ageing population, ageing taxi drivers, the progressive depopulation of the surrounding areas and severe winter conditions. Hokkaido has a high rate of fatal car accidents involving elderly people in their later years, and the Metropolitan Police Department encourages

them to voluntarily return their licences (Hokkaido Prefectural Police, 2023). Furthermore, this is a chronic problem in the taxi industry, which traditionally focuses on recruiting them as a second career. The average age of taxi drivers in Hokkaido is 62.8 years old as of 2022. Passenger transport by shared mobility, which offers more time and schedule flexibility for young people, has the potential to complement traditional mobility as an alternative (Japan Federation of Hire-Taxi Associations, 2023). Hokkaido's transport has a core-periphery structure, with a network of transport infrastructure starting from Sapporo City, the capital of Hokkaido, which comprises approximately 40% of the population. According to the population age structure in the 2020 census, 32.2% of the population is aged 65 and over (Hokkaido Prefecture, 2022a). As of April 2022, the depopulation rate in Hokkaido was 84.9%, with almost all municipalities having depopulation problems, except the Sapporo area and several other major cities (Hokkaido Prefecture, 2022b).

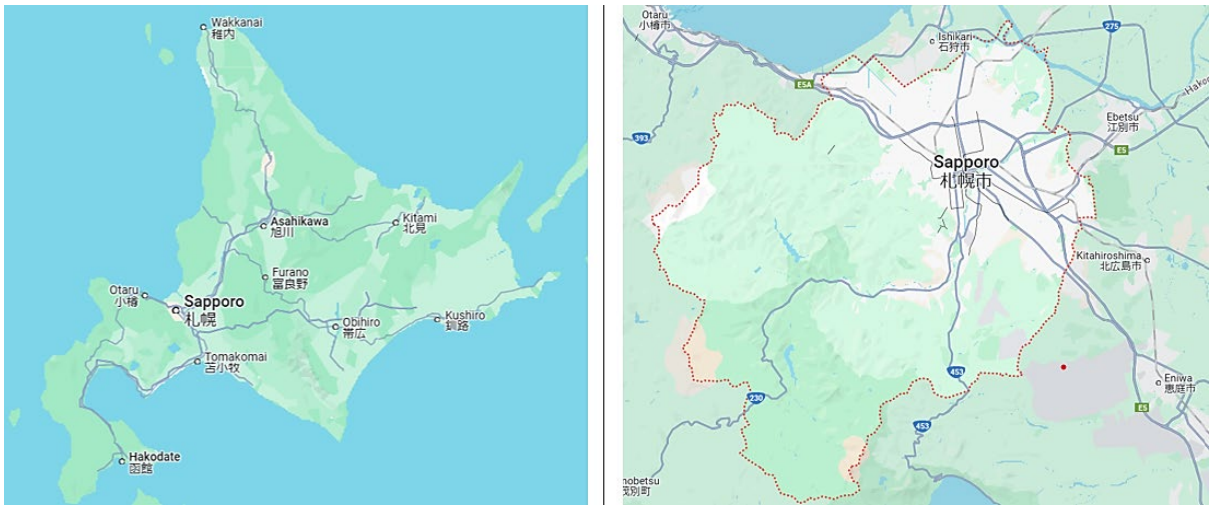

Figure 1: Map of Hokkaido and Sapporo City
Source: Google (n.d.)

The respondent sample was confined to residents of Sapporo City, aged 18–29 years and possessing a general driver's licence. As of 2023, 1,214,635 people (approximately 61% of the population of Sapporo) had a driving licence, of which 157,840 people aged 18–29 were licence holders (City of Sapporo, 2024). The reason for limiting respondents to Japanese is that in many Asian countries where ride-hailing is legalised, a condition of registration is that the respondent must be a national of that country. In order to approach the appropriate respondents, this study used judgemental sampling. Interviews were conducted under research ethics, including data collection objectives, voluntary participation and protection of personal data. It is difficult to elicit a precise calculation for the sample size of structured interviews under qualitative research as it depends on the determinants of that study and the research techniques (Malterud et al., 2016; Mason, 2010; Morse, 1995; Uchiyama et al., 2022). Marshall et al. (2013) highlight the lack of sample size justification for qualitative research in recent years. Although case studies tend to have relatively small sample sizes, one case study is sufficient for a detailed contextual analysis of the research objectives interviews to account for saturation points (Sarfo et al., 2021). Therefore, in this study, a target of at least 15 people was set and the sample size was adjusted by looking at the saturation point (Boddy, 2016). This study finally interviewed 18 people living in Sapporo, Hokkaido, Japan. Table 1 shows the demographics of the participants.

Table 1: Interview participants' demographics

Demographics	N = 18	Percent of sample (%)
Gender		
Male	11	61.1
Female	7	38.9
Age group		
18–24	5	27.8
25–29	13	72.2
Frequency of driving		
Everyday	4	22.2
At least once a week	5	27.8

Table 1: Interview participants' demographics (continued)

Demographics	N = 18	Percent of sample (%)
At least once a month	7	38.9
Below once a month	2	11.1
Awareness of mobility services		
Yes	13	72.2
No	5	27.8

All interviews were conducted in Japanese and all scripts were translated into English at the transcription stage. The author asked mainly four open-ended questions, aside from demographic information. The first question concerned impressions of and experiences with shared mobility services. The second question asked whether or not they would be willing to use the service as a passenger if shared mobility services became widespread in Japan (Sapporo), and why. The third question asked whether or not they would be willing to register for the service as a driver if shared mobility services became widespread in Japan (Sapporo) and the reasons for this. The fourth question asked why mobility-sharing services are preventing their diffusion in Japan (Sapporo).

Based on data obtained from in-depth interviews, this study employed a thematic analysis. The analytical process consisted of three main stages (Braun & Clarke, 2006; Uchiyama & Furuoka, 2025). First, through open coding, terms and descriptions related to youth cognition and acceptance were extracted from the full interview texts and organised as initial codes. Second, axial coding was performed by comparing and integrating these initial codes to identify common meaning structures and relationships. Third, selective coding was used to finally identify the main themes and subthemes. Through these processes, a theme table was created to visually organise the relationships between each theme, thereby clarifying the younger generation's understanding and acceptance of shared mobility.

4. FINDINGS: UNDERSTANDING AND PROMOTING THE BENEFITS OF SHARED MOBILITY AT THE GRASSROOTS LEVEL

In Japan, door-to-door mobility services are strictly controlled by the legal system and existing forces even after the lifting of the limited ban. Paradoxically, the relative shortage of taxis due to inbound demand in urban areas and tourist destinations, and the lack of transport options in areas facing ageing and depopulation are increasing the need for shared mobility. With the taxi industry ageing alongside the ageing Japanese society and the maintenance of a strict regulatory regime, understanding of the younger generation in terms of awareness and acceptance of shared mobility could be a catalyst for the expansion of fragmented shared mobility operations in Japan. Given the stagnation of driving and licence return by the elderly, the spread to younger generations could lead to the development of sustainable shared mobility operators and a more sustainable ecosystem. The interview data collected was analysed using thematic analysis to identify four main themes and 16 sub-categories as shown in Table 2. The results of the interviews provide a clear picture of what is needed to make shared mobility services more satisfying for both users and providers.

Table 2: Thematic table

Main themes	Sub-themes	Related interview questions
1. Services under development in terms of institutional and visibility	- Expensive transportation - Convenience - Cumbersome procedures - Under construction	Impressions
2. Differentiation from existing well-developed services	- Unclear image - Strong power of public transportation - Trust in existing taxi services - High barrier to prevalence	Use service as a customer
3. Necessity of proper matching of share activities and national characteristics	- Concerns of reliability - Cautious national character - Lack of confidence in driving skills - Liability for accidents	Provide service as a driver

Table 2: Thematic table (continued)

Main themes	Sub-themes	Related interview questions
4. Understanding the social diffusion mechanisms behind service adoption	- Brand strength - Instalment guidelines - Promotion and advertisement - Superior convenience to public transport	Factors to induce participation

4.1 The underdevelopment of services in terms of institution building and visibility

Whilst 72.8% of respondents were aware of the existence of mobility services to a small extent, 18.2% were unaware of the services themselves. Although some had used car sharing in Japan, all those who had ever used ride-hailing or carpooling were through travelling or studying abroad, not in Japan. Therefore, most of them started recognising the services from actual overseas examples, and no one knew there were mobility services in Japan, except for car rental sharing such as Times. The visibility of such services in Japan was perceived as low, especially compared to accommodation-sharing and bike-sharing (R-6 and R-15) R-1 referred to the following unique perspectives on the differences between the prevalence of the service abroad and its status in Japan:

> "I first heard about e-hailing services when I started studying abroad. In Japan, I had an impression of taxis as an expensive means of transport, so I was surprised that they were affordable and available to everyone. In Japan, taxi reservations are generally made by catching a taxi on the street or by calling a taxi company. On the other hand, with ride-hailing services such as Uber and Grab, we can hire a private car from the app. GO is also available in Japan as an app-based hiring platform, but this app does not offer the same convenience as Uber and Grab, and the price range is similar to traditional taxi fares. Compared to other countries, I have the impression that e-hailing in Japan is still in its infancy." (R-1)

Based on the current state of development, many respondents formed their impressions of shared mobility based on its potential rather than direct experience. Some of them also pointed out that shared mobility is a cost-effective and flexible option, particularly for people who do not drive frequently or who find it difficult to purchase and maintain a personal vehicle. However, the ambiguous public image and limited accessibility of such services in Japan were frequently cited as factors contributing to hesitation. For instance, R-1 noted that domestic app-based ride-hailing services (e.g., GO) fall short of international standards in terms of pricing and usability, provided by Uber and Grab, thereby diminishing the overall appeal of shared mobility options.

4.2 Differentiation from existing well-developed services

Through the analysis of participants' detailed responses to whether they would be willing to use shared mobility services as customers, it became evident that clear differentiation from existing public transport and taxi services plays a central role in shaping user perception. This distinctiveness was considered an essential factor in attracting potential users by demonstrating that the transportation service could provide added value beyond existing public transportation and taxi systems. Respondents also mentioned that since the public transport system, including trains, subways, and buses, is well-developed in Sapporo City, people do not tend to use taxi services, including mobility services, in urban areas with good transport links. However, R-1 noted that shared mobility may be necessary in areas not covered by existing public transport.

The main issue for use among respondents was the reliability of the service. For those who do not know what mobility services are or have never used them, comparison with existing services is the easiest indicator to measure the degree of reliability. As R-6 indicated, a clear distinction is needed between taxis and e-hailing/carpooling and if the safety aspects are equal to or better than the quality of existing services, they will use mobility services.

> "Professional taxi drivers belong to a company and provide a service for a profit, whereas ride-hailing or carpooling drivers are not professional drivers and are on an individual basis. So, the quality of service will be lower. In this case, it is important how much prices can be reduced. As far as price is concerned, I might use a ride-hailing or carpooling service if there is a 20–30% discount on taxis." (R-6)

In addition, price competitiveness was a key concern, especially for those who were willing to use the service only if it was cheaper than existing taxis. Regarding the quality of this service, respondents stressed the importance of legal safeguards to ensure passenger safety, given that ride-hailing and carpooling drivers are not professionals (R-7). This was because there were concerns that riding in a car with a stranger could lead to

personal danger and crime (R-2). Several respondents also mentioned discomfort with being in a closed space with strangers, citing it as a risk factor. An issue was described by R-4 concerning an issue between the proliferation of online food delivery services such as Uber Eats, which is prevalent in urban areas of Japan, and the problem of riders as follows:

> "With Uber Eats, the riders are responsible for the delivery because Uber does not interfere much with the riders. However, the users do not know what kind of rider will come, and there have been several incidents between users and riders. So, how to guarantee the safety of customers who do not know the identity of the driver is a key factor in whether they use the service or not." (R-4)

Additionally, some respondents pointed out that shared mobility could serve as a catalyst for reforming the traditional taxi industry. It is noteworthy that some respondents felt that this industry was rigid and dominated by vested interests. From the customer's perspective, taxis are reliable but expensive and not always convenient. To elicit change in the inefficient market structure within the taxi industry, R-11 emphasised the potential of shared mobility:

> "I want to use the mobility services as a customer as I think its development would create a more efficient and healthy market. I hope this new service will function to disrupt the vested interests prevalent in existing taxi services." (R-11)

4.3 Necessity of proper matching of shared activities and specific national characteristics

Regarding drivers' willingness to register for shared mobility services, the interview results confirmed several concerns based on perceptions and expectations rooted in Japan's unique cultural background. Initially, the low cultural affinity for the idea of sharing private space with strangers created psychological barriers and distrust, which made respondents reluctant to register. Respondents expressed concerns about the possibility of damage to personally owned vehicles (R-1), involvement in criminal activities or unpleasant interpersonal relationships (R-4, R-7, R-8, R-9, R-10, R-11), and the absence of shared norms in service usage. These concerns may be partly attributed to Japan's social norms of high service quality, risk avoidance, and limited openness to informal peer-to-peer exchanges (R-7, R-17). This perspective was succinctly articulated by R-21:

> "Even if shared mobility services are introduced in Japan, I think there are more concerns about reliability and not getting involved in crimes. Therefore, I think that many Japanese will start using it once the service quality is guaranteed to some extent and it becomes widespread." (R-21)

In addition, even individuals who drive frequently report a lack of confidence in providing professional services and highlight that they feel they lack driving skills and hospitality skills compared to trained taxi drivers. In particular, R-17 pointed out concerns about the need to provide specific services that differ from a normal driving experience. These include the scent of air fresheners, infection control measures, and vehicle cleanliness, all of which contribute to a sense of unpreparedness. This reflects a perfectionist orientation toward service provision, wherein individuals are reluctant to engage in providing services unless they believe they can meet exceptionally high standards. Furthermore, concerns about legal clarity and institutional support exacerbated this hesitation. For example, R-10 was sceptical about the platform's responsibility in the event of an accident:

> "In Japan, we are not sure if the companies will protect us, as the working conditions of Uber drivers were a hot topic for a while. Even if they get into a traffic accident as a result of an outsourcing contract with us, they will likely pass the responsibility for damages onto us, making us too much of a liability in the event of an accident. So, I do not want to register the mobility services." (R-10)

However, opposing views highlighted the potential opportunities for participation in the platform among specific groups. Some respondents pointed out that university students, freelancers, and people seeking flexible income opportunities are in a position to benefit from sharing mobility platforms. As R-21 pointed out, restrictions on part-time work for full-time employees limit participation, but young people and freelancers may be more receptive to such work. Similarly, older individuals with available time and driving experience were identified as a potential pool of drivers, provided that institutional safeguards and operational transparency are sufficiently reinforced.

4.4 Understanding the social diffusion mechanisms behind service adoption

Whilst many challenges in the diffusion of shared mobility services remain, participants provided important and vivid insights into the social factors that shape service uptake. The analysis particularly

highlighted several mechanisms through which trust, visibility, and familiarity contribute to adoption. In Japan, there was a tendency to believe that "if everyone uses it, others will too" (R-2). A peer-based, trust-building process via community influence and social media was described by R-5:

> "For ride-sharing and car-pooling services to spread in Japan, it is important that people close to you are using them. The trigger will be word of mouth by younger generations, which will spread through social media and reach their communities. In this way, they will finally start using the service. As a result, it is possible to prove that the service is socially trusted. However, I have never heard of ride-hailing in the Sapporo area, either from the media or from friends." (R-5)

This suggests that the spread of shared mobility in Japan is unlikely to arise from individual choices based on functional convenience but rather is likely to depend on collective social approval within close-knit networks of friends. As R-5 pointed out, adoption becomes more realistic when "people close to them start using it," highlighting the role of peer influence and social proof as key mechanisms in building trust. A recent case illustrating this form of diffusion is the partially legalised electric kickboard service, or 'LUUP', in Tokyo. This service gained popularity through visibility, use by peers, and reliable service content (R-4). However, its adoption is contingent on meeting the high expectations of Japanese consumers regarding safety, reliability, and transparency. This point is particularly important in Japan, where few users feel such strong economic pressure that they would ignore safety concerns (R-6).

Concerns about safety and reliability were particularly pronounced among female respondents. As R-7 pointed out, being matched with an unknown driver causes significant discomfort, which is further contextualised by the existence of women-only carriages in Japan's public transport system. This highlights the need for strict user authentication, gender-sensitive matching mechanisms, and institutional safety measures built into the service design. R-14 specifically proposed a dual safety management system in which platform companies are supervised by separate regulatory agencies. Furthermore, some respondents emphasised the importance of understanding regional differences in service demands. In Japan, where owning a car per family is the norm, many people may think that there is no need to use the service. However, it would be possible to identify demand among young people, many of whom have a license but do not normally drive (R-13).

After these preparatory steps, the need for effective advertising and media promotion may emerge. Therefore, in raising awareness it could become a "sales pitch" to attract users. However, some respondents argued for the need to build convenience over public transport and the existing taxi industry. However, it is also a fact that there are vested interest groups in Japan, such as taxi associations and politicians, that inhibit the spread of the service (R-11). If mobility services are not positively received by many users and their needs are not justified, the underlying problems prevailing in the market will not be solved. The initiative of young people, who are relatively flexible in their thinking and trends, to participate in shared mobility may lead to its spread to various generations.

5. DISCUSSION AND CONCLUSION

This study examined the understanding and acceptance of shared mobility services among youths living in Sapporo, Hokkaido, and provided new insights into the future introduction of such services in Japan. Notably, this study focused on the interaction between Japan's unique challenges within its social structure, such as a declining birthrate and ageing population, and the institutional rigidity observed in the existing transportation industry (e.g., the vested interests of the taxi industry). This reveals that the introduction of shared mobility is not merely a technological issue; it is also challenged by a deeply rooted and complex institutional and cultural context.

The analysis results indicate that attitudes toward the introduction of shared mobility in Japan are strongly influenced not only by institutional and technological factors but also by socio-psychological factors such as cultural and social trustworthiness and comparability with existing services (safety, price, reliability, etc.). Even in Sapporo, a city with a highly developed transportation infrastructure, usage experience among younger generations is limited, with respondents primarily basing their opinions on overseas experiences (Nakamura, 2022). This suggests that, alongside universal theories such as diffusion of innovations (Rogers et al., 2019) and the technology acceptance model (Davis, 1989), greater attention must be paid to behavioral and socio-cultural dimensions. Mobility is not simply a mode of transportation. It is a socio-technical phenomenon that emerges at the intersection of social structures, cultural norms, political institutions and technological systems, aligning with the mobility paradigm (Sheller & Urry, 2006, 2016). In fact, this study revealed that although more than 70% of respondents were aware of shared mobility in general, their awareness was mainly based on overseas experiences. Even though ride-hailing has been partially legalised in

mid-2024, people in Sapporo had never actually seen ride-hailing vehicles in operation (Mainichi Shimbun, 2024). This highlights that there is still a gap in awareness that hinders the spread of ride-hailing. Additionally, the survey results highlight fundamental institutional contradictions. Whilst ride-hailing has been partially liberalised, the number of operating vehicles remains strictly limited, restricting actual usage opportunities and hindering behavioral change (Orita, 2024).

Furthermore, trust in shared mobility is particularly important. As evidenced by the existence of women-only carriages in Japanese public transport, social factors beyond convenience and cost efficiency influence whether such systems are adopted. This is deeply connected to the structure of social capital in Japanese society, where bridging capital, which promotes collaboration with unfamiliar others is relatively weaker compared to bonding capital, which is based on close relationships (Patulny & Lind Haase Svendsen, 2007; Putnam, 1994). Therefore, resistance to contact with strangers in P2P-type mobility can act as a factor limiting its scalability from an institutional and cultural perspective. This socio-cultural characteristic was clearly reflected in the interview findings, with many respondents expressing reluctance to assume the role of driver due to concerns regarding trust, service quality, and liability. The so-called 'perfectionist' standards in Japanese service culture were a contributing factor to the psychological barriers that caused even confident drivers to question their suitability for passenger service. These barriers were further reinforced by legal and institutional constraints, consistent with previous research on institutional deterrents (Altura et al., 2021). In light of these circumstances, discussions regarding the adoption of shared mobility in Japan must address not only the cultivation of social trust and institutional design, but also the indispensable role of the physical and institutional "hardware" that underpins such systems (Uchiyama, 2025a, 2025b). Considering this complexity, this case can be redefined as a public resource based on the concept of social common capital as a theoretical pillar (Uzawa, 2005). In particular, Uchiyama (2025a) redefines shared mobility in Japan as social common capital and points out that a trinity of infrastructure, development, institutional inclusion, and active participation by local residents is essential for the realisation of sustainable urban mobility.

This study lies not only in describing the attitudes of young people, but also in positioning them as co-creative partners in the reconstruction of mobility in an ageing society with a declining birthrate. According to Farrugia's (2016) concept of youth mobilities, young people can be seen not merely as policy targets, but as cultural and technological mediators of mobility. From this perspective, shared mobility can be seen not exclusively as a complementary service, but as an opportunity for social restructuring through collaboration between young people and local communities (Thelen & Oguma, 2021). However, the results of this study are based on a case study limited to Sapporo City, Hokkaido, and do not indicate that young people in Japan unanimously support the spread of shared mobility. In particular, the ambiguous feelings and sceptical views toward becoming service providers, as well as concerns about safety and reliability, should be given due consideration. Future research should focus not only on shared mobility as a supplementary mode of transportation but on institutional design that promotes active youth participation and enables sustainable service provision. Anchored in youth acceptance of shared mobility, the findings should be regarded as a foundation for more participatory approaches to mobility policymaking. Reconsidering the ecosystem of this sector necessitates close attention to the complex and often contradictory perceptions articulated by young people.

ACKNOWLEDGEMENT

The author would like to express sincere gratitude to the anonymous reviewers for their constructive feedback and insightful suggestions. The author also wishes to thank all interview participants in Sapporo for generously sharing their time, experiences, and perspectives.

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