

Tourists' use of public transport in urban destinations: An experiential perspective of tourists

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INTRODUCTION

Transportation and tourism are closely intertwined and influenced by each other (Antolini, 2022). As traffic increases, leisure travel also increases, positively affecting the economy by stimulating consumption (Sirgy et al., 2016) and raising problems. According to the World Health Organization (2023), transportation occupies about one-quarter of greenhouse gas emissions, contributing to the health burden and environmental pollution. Thus, there is considerable interest in the correlation between tourism, transportation and the environment (European Parliamentary Research Service, 2017). Sustainable tourism is inevitable for solving environmental problems, and to achieve this goal, sustainable transport is crucial. Encouraging tourists to use public transport is a strategy to help achieve more sustainable transport systems.

While extensive research has explored the environmental impacts of tourism-related transportation, less attention has been paid to understanding the experiential dimensions of tourists' public transport use within urban destinations (Le-Klähn and Hall, 2015). Especially, although several studies have argued that the general factors influencing mode choice (Redman et al., 2013; Litman, 2008), lack of research explains how social practice theory and motivation theories intimately related to shape tourists' experiences with public transport. Furthermore, despite the growing importance of technological interventions (APTA, 2023), few studies have explored how tourists' prior knowledge and self-efficacy influence their ability to effectively use these technologies to enhance their public transport experiences. Additionally, several studies have highlighted the issues related to cost and time consumed in preparing governmental policies (Hudson et al., 2019).

This research aims to explore tourists' experiences of using public transport in urban destinations integrating social practice theory and motivation theories to understand how these experiences can inform strategies to enhance public transport adoption. First, to analyse how tourists' prior knowledge and self-efficacy influence their decision to use public transport, and second, to assess the role of travel companions and social context in shaping tourists' attitudes and behaviours towards public transport usage.

LITERATURE REVIEW

The government supports public transport and helps residents and tourists achieve social and environmental goals (Veeneman, 2018). It accommodates multiple passengers, offering affordable travel while reducing road congestion and emissions. Based on Beirão and Cabral (2007), this research considers buses, underground tubes, overground trains and trams as forms of public transport and rental cars, taxis and Ubers are excluded, are considered private-hire vehicles.

Public transport has four key characteristics. First, it has a lower environmental impact, as its development reduces carbon emissions (Jing et al., 2022; Wright, 2015). Second, it ensures mobility for tourists is unfamiliar with local geography, providing a cost-effective alternative to private-hire vehicles (APTA, 2023). Third, options like underground trains and trams are more punctual, enhancing reliability and user satisfaction (Feres et al., 2022; Van Lierop et al., 2018). Lastly, public transport primarily serves residents, with routes planned for daily commuters, making taxis or Ubers more convenient for tourists visiting remote attractions. Despite this, public transport remains vital for tourism (Samková & Navrátil, 2023). A well-developed network boosts tourist usage (Mandeno, 2011; Yang, 2010) and shapes a destination's image, sometimes becoming an attraction itself (Hadlaw, 2003; Hall et al., 2017). Thus, understanding the factors which influence tourists' transport choices in tourist destinations is necessary. In this research, travel motivations, pre-identification information

(information accessibility through mobile applications, price, transfer systems, easy access to public transport), local insights (public transport safety), and other considerations (the outbreak of infectious diseases and levels of interest in environmental issues).

Meanwhile, understanding the desire and motivation is necessary before promoting public transport to tourists. Wagner (2021) argued that human needs lead to motivation, and motivation leads to human behaviour. Tourism is a means of motivating people to solve their deficit needs. When explaining tourism motivation, Maslow's hierarchy of needs is mainly used by several researchers (Hsu and Huang, 2008). However, Maslow's hierarchy of needs has some problems. Firstly, the fulfilment of needs does not follow as he suggested. Secondly, this theory does not sufficiently reflect individual cultural differences and social environments (Hoyer et al., 2018). Thus, based on consumer behaviour and marketing theory, this research uses the framework of utilitarian, symbolic and hedonic motivations. Tourists conduct consumption during travelling, so the framework of motivations is necessary to understand the behaviour of tourism consumers.

Utilitarian motivation aims to solve consumer problems and enhance convenience (Guido et al., 2014), addressing tourist concerns like facility quality, punctuality, safety, hygiene and language accessibility (Yuda Bakti et al., 2020). Symbolic motivation reflects personal values, social status, and group identity, influencing choices based on environmental awareness, status, family composition, and self-expression, such as adopting local lifestyles (Sevillano et al., 2010). Hedonic motivation seeks pleasure, excitement, and new experiences driven by high-quality service and novelty (Yuda Bakti et al., 2020).

Even though tourists are motivated to use public transport, they could change their minds because of the outbreak. Usually, attitude and behaviour are linked, but discrepancies happen when behaviours contradict attitudes, called the attitude-behaviour gap (Elhaffar et al., 2020; Juvan and Dolnicar, 2014). Several theories are related to the attitude-behaviour gap, and the theory of planned behaviour is one of the most used. However, the theory of planned behaviour has some limitations. Thus, this research uses social practice because social practice focuses on why behaviour occurs within tourists' situational context. Moreover, Bruno and Nikolaeva (2020) argued that social practice holistically views the causes of human behaviour related to socially shared aspects and concentrates more on human behaviour. In other words, social practice theory is the most appropriate way to explain the causes and context of human behaviour because this study focuses on analysing public transportation experiences and the reasons behind public transport usage behaviour.

General social practice is classified into three factors: Meanings, Materials, and Competence (Shove and Pantzar, 2005). However, in this study, four elements are used in the social practice theory, with the addition of 'relation' to the three existing elements (Meanings, Materials, and Procedure). Scott et al. (2012) mentioned that Meanings are the socially/personally formed spiritual thoughts tried or achieved through practice. These thoughts are further sorted into three perspectives: social conventions, images, and others' perceptions. Materials include the intuitive physical use of an object and the technology influencing human practice (Schatzki, 2013). Procedure is the objective, rational knowledge related to practice, the proficiency in performing the behaviour simultaneously and the experiences gathered throughout an individual's life. Procedure is sorted into related knowledge and experiences, competence, know-how, and frameworks such as plans and schedules. In society, individuals are influenced by each other, and travel partners can impact during the tour. The 'relation' factor has been added for this reason. Thus, in this research, public transport usage behaviour is combined with motivation theories under the big framework of social practice theory.

METHOD

This study adopted a sequential mixed methods design, beginning with qualitative interviews to explore key themes, followed by a quantitative survey to test and expand on these findings (Flick, 2018; Breitbart, 2010). A sequential exploratory methodology is suitable for exploring social phenomena, identifying themes and designing variables for quantitative research after qualitative exploration (Almeida, 2018). This methodology allows researchers to collect more in-depth and reliable data than other research techniques (Creswell, 2009). In relation to public transportation use, the sequential mixed

method is reasonable because conducting interviews could intensify the result analysis and provide additional and unexpected information, which can uncover the complex causes of transit use behaviour (Flick, 2018; Bajpai, 2016).

Nineteen participants were interviewed in several qualitative interviews. When studying human life phenomena, Creswell (1981) argued that interviewees should be 5 to 25, and Bertaux (1981) discussed that the minimum number of interviewees should be 15. Francis et al. (2010) also agreed that 15 participants can achieve data saturation in the social field. Thus, the interview was set as 19 including 4 pilot interviews. This research focuses explicitly on 19 South Korean adults over 18 years or above who travelled to the United Kingdom between 2022 and 2024. The interview participants are Koreans who organise their transport independently in the United Kingdom's urban tourist destinations. The qualitative results are analysed by NVivo 12.5. Based on qualitative result, this study set the hypothesis for quantitative stage by using SPSS 29 for deeply analysing the factors. All procedures were approved by the university ethics committee, and informed consent was obtained from all participants.

FINDINGS

The research discovered seven drivers encouraging public transport usage and five barriers preventing public transport usage. The first driver is convenient accessibility. Related to convenient accessibility, interviewees discussed the ease of navigation & accessibility, ticketing & payment convenience, physical quality of public transport infrastructure, local convenience for tourists, and social consideration in public transport. Tourists feel comfortable when public transport easily leads to iconic tourist destinations and convenient ticketing and network services are well-facilitated. Plus, bus drivers consider socially vulnerable classes, leading tourists to use public transport who find it challenging to use it. The second driver is service quality & passenger comfort. Tourists crucially consider hygiene, particularly amongst international visitors. Enough storage of several pieces of luggage is also a trigger factor for tourists using public transport. Professional service-delivery provided by public transport staff and comfortable facilities also made their journeys pleasant. The third driver is cost-effectiveness. Tourists prioritised cost-effectiveness over the mere affordability of public transport. Particularly, participants focused on the need for modernised facilities and an integrated transport system. The fourth driver is reliability & safety. Tourists are satisfied with public transport when they feel safe and punctual with the public transport. The fifth driver is sustainability & environmental contributions. Due to the lack of infrastructure and the priority of individual enjoyment in travelling, the barriers to using public transport happened. However, over three-quarters of participants acknowledged the environmental contribution of public transport, which is a potential driver to lead tourists to use public transport. The sixth driver is language & culture familiarity. When tourists are accustomed to the language and culture of the tourist destination, tourists have the confidence to use public transport. Expanding multilingual support and language access suggests increasing tourists' participation in public transport services. The seventh driver is sensory & novelty factors. The scenic & sensory enjoyment and the novelty & new experiences offer a unique experience specialising in tourist destinations, leading tourists to use public transport.

The first barrier is operational and systemic challenges in transportation. When public transport has problems related to infrastructure, such as the absence of screen doors and WIFI network connectivity, ticketing issues, such as complex purchasing processes, digital payment inconsistencies, and information & time management issues, make hesitation to use public transport. The second barrier is the cleanliness & sanitation issue. Several tourists are worried about their health, particularly a dense transportation space when using public transport. Tourists judged that permanent and well-prepared quarantine and hygiene conditions increase trust regardless of disease conditions. The third barrier is the crime and lack of security. Inferior law enforcement management happened because of inadequate security presence. Enhanced security presence and rigorous enforcement could boost the reliability of tourists' use of public transport. The fourth barrier is cultural unfamiliarity. The research discovered that the tourists' position should be considered when designing a transportation system. The fifth barrier is the mobility stress & efficiency decline. Crowding & capacity challenges, bad weather, low time efficiency and tiredness of public transportation hinder public transportation use.

Before the beginning of the travel of public transport, tourists priorly discovered the knowledge of general & comprehensive information on public transportation systems, alerts & service updates, ticketing & pricing and accessibility. Prior knowledge amplifies positive experiences and lessens the barriers to using public transport. However, the absence of prior knowledge could make well-facilitated functions as potential barriers. Self-efficacy is also a crucial factor when using public transport because it happens when the participants approach unfamiliar environments. Technical interventions could enhance gaining more enough prior knowledge and boost the development of self-efficacy. Individual self-efficacy could influence the individual transportation choice, but the existence of travel companions could influence the intention to use public transportation.

IMPLICATIONS OR CONCLUSION

Research indicates that prior knowledge, technological interventions, and self-efficacy significantly influence tourists' intention to use public transport. Well-designed technological interventions help tourists apply prior knowledge effectively and enhance their self-efficacy. Furthermore, this research extends the application of social practice theory by demonstrating the importance of travel companions ('relations' factor in social practice) in shaping tourists' public transport choices. Tourists are more likely to adopt public transport when travelling with knowledgeable companions, highlighting the social dimension of sustainable mobility. Travel companions and English proficiency also play crucial roles in shaping transport behaviour. Travel companions moderate the relationship between self-efficacy and the intention to use public transport. Regarding language proficiency, tourists who are more comfortable using English tend to feel more confident, making them more likely to use public transport.

The results also suggest that tourists heavily rely on mobile navigation applications such as Google Maps, Naver, and Oyster card payment systems. Many participants reported feeling anxious without digital assistance. To reduce anxiety and increase confidence, enhancing technological support for navigation is essential. Public transport authorities should prioritize digital accessibility and multilingual services to improve tourist experiences. Quantitative sections will deeply analyse which factors will more effectively lead to encourage or hinder to use public transport. Additionally, this research explores the impact of policy interventions such as incentives on tourist adoption of public transport. Additionally, in the end, this study could examine the role of destination image and branding in shaping tourists' perceptions of public transport systems.

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