Research Paper

Visitor users vs. non-users of public transport: The case of Munich, Germany

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ABSTRACT

Although its importance for sustainable tourism is recognised little research has been conducted on tourist use of public transport. This paper examines the use of public transport by visitors in the city of Munich, Germany. Its objectives are twofold. First, it investigates the motivations for using or not using public transport. It focuses on distinctive characteristics between the users and non-users and how they are different in their demographic and travel profiles as well as their attitude towards public transport. Second, it seeks to understand which factors influence visitor use of public transport. The main reasons for visitor use of public transport are drive-free benefits, traffic reduction, advantages of local public transport, and car unavailability. In contrast, what often discourages public transport use are inconvenience and restrictions, lack of information, disadvantages of public transport and personal preferences. The five most important variables that differentiate visitor user of public transport from a non-user are length of stay, main purpose of trip, age group, frequency of public transport use at place of residence, and valid driving license ownership.

The study highlights the importance of public transport information and accessible and conveniently located train stations and bus stops for visitors and locals alike. A significant finding is the extent to which public transport needs to be promoted as part of strategic destination marketing. The use of social marketing techniques to influence behavioural change with respect to public transport use is therefore desirable in the pre-trip decision stage as well as at the destination.

1. Introduction

Tourism is essentially the voluntary short-term movement of people through time and space, either between home places and destinations or within destinations (Coles, Duval, & Hall, 2004; McKercher & Lew, 2004). The movement patterns of visitors are the results of a complex interaction between several factors such as human factors, physical factors, trip factors, and time factors (Lau & McKercher, 2006). Furthermore, the transport modes selected by tourists during their stay at the destination influence their movement patterns with the extent of the area visited linked to the transport mode choices (Masiero & Zoltan, 2012; Koo, Wu, & Dwyer, 2010).

Among various modes of land transport, the car is most often used for travel and leisure purposes in developed countries (Duval, 2007; Hall, 2010). However, growing populations and increasing demand for leisure and tourism have led to more congestion, pollution, and traffic problems in many cities worldwide. The need for sustainable urban transport practices including with respect to tourism has therefore become increasingly urgent (Guiver, Lumsdon, Weston, & Ferguson, 2007; Regnerus, Beunen, & Jaarsma, 2007). Due to its multiple environmental, social and economic benefits (Gwilliam, 2008; Litman, 2007, 2011), public transport (PT) (otherwise referred to as mass transit, public transit, and public transportation) is promoted as a potential car replacement. Yet encouraging a modal shift is not an easy task (Dickinson, Robbins, & Fletcher, 2009; Gössling, 2011; Hall, 2014; Lumsdon, Downward, & Rhoden, 2006; Redman, Friman, Gärling, & Hartig, 2013). To promote PT use, whether to visitors or to local users, it is critical to have an effective and efficient PT system. In particular, PT services should be demand-oriented and a good knowledge of customer behaviour is thus of great importance (Gronau & Kagermeier, 2007). However, to date

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most research on PT is focused on local users rather than the PT needs of visitors.

Public transport is also considered as an additional tourism product, which adds to the total tourist experience (Duval, 2007) and may influence tourist satisfaction with the destination (Thompson & Schofield, 2007). It is important therefore to identify PT users for management and marketing purposes. Nevertheless, there is a substantial lack of information on the tourist users of PT (Lumsdon et al., 2006). In addition, while non-users of PT could be potential users (Dallen, 2007a; Krizek & El-Geneidy, 2007), not much is known about this group and how they are different from the users in terms of personal characteristics and attitudes towards PT.

This paper contributes to filling the gap in the literature by examining how visitors use PT in the city of Munich, a major tourism gateway and destination in Germany (German National Tourist Board, 2012). Public transport mentioned in this study refers primarily to rail (train, tram, subway) and buses. It seeks to understand the tourist reasons for using and not using PT at a destination as well as the most important factors determining the PT usage. The paper concludes with implications for future research as well as recommendations for PT management and operators.

2. Tourists' use of public transport

2.1. Characteristics of the tourist users of PT

The tourist users of PT are a group distinct from resident users. Newcomers to the city of Dublin, for example, were more concerned with the provision of information and reliability of service and placed less emphasis on traditional aspects of PT such as service quality and safety (Kinsella & Caulfield, 2011). Dubliners, on the other hand, considered punctuality, frequency and waiting times as most important. In addition, tourists differ from local users in their information search behaviour as they require more information and use different sources (Thompson, 2004). Information centres, word-of-mouth, attraction leaflets, Internet and accommodation providers are common information sources for tourists.

Tourist users of PT may also have diverse backgrounds and differ between rural and urban areas. In urban areas, users of PT for tourism purposes tend to be well-educated and the majority hold a driving license (Farag & Lyons, 2012). This group of users are generally of a younger age (Farag & Lyons, 2012; Quiroga, 1990; Thompson & Schofield, 2007). A study of PT use by tourists in Manchester, for instance, had 73% of the respondents under 35 years old (Thompson & Schofield, 2007). However, a different situation is found in rural areas. Lumsdon et al. (2006) indicated that the majority users of the Wayfarer, a multi-modal ticket for day excursions to the countryside in the United Kingdom, were aged 55–64 and retired.

2.2. Categories of visitor PT users

Public transport users in rural areas are not homogenous. Lumsdon (2006) found two groups of tourist bus users: the "sightseer" and the "activity seeker". The "sightseer" forms the largest user segment of the tourism bus network in the UK, whose main purpose of using the bus is for a scenic ride. Nevertheless, "avoiding parking fees", "driving in unfamiliar places", and "social contact with others" were also reasons. Most sightseers were around 40 years old plus, travel solo or as couple, but there were also a subsegment of older women who looked for social contact and a subsegment of young backpackers travelling without a car. The second, "activity seeker group", include mostly older people tended to use the bus to do leisure activity such as walking, cycling and surfing.

Dallen (2007a) categorised visitors to St Ives (UK) into two segments based on whether they used the train services. Visitor users of the train were then grouped into "road regulars", "public transport reliants", and "train enjoyers". "Road regulars" tended to be family groups who are regular car users, using PT to travel mostly to avoid road congestion and because of recommendations. "Public transport reliants" are those often in younger age group (16–34), less likely to possess a driving license and a car. This group includes mostly regular PT users and international visitors. The "train enjoyers" by contrast, are older in terms of age (45–54 range) and chose to travel by PT to enjoy a scenic and relaxed train ride. Non-users were classified by Dallen (2007a) as "anti-rail riders", "content car drivers" and the "train tempted". "Anti-rail riders" are those of higher socio-economic occupational background who have strong preference for a car for independence and convenience. The "content car drivers" are familiar with train travel but are indifferent about whether it is an enjoyable mode. The last group, the "train tempted" is believed to have the greatest potential to switch to an alternative PT mode. This group consists of mostly visitors over 55 years old, retired and likely to be male.

Similarly, visitor users of the train in The Looe Valley (UK) were identified as consisting of the "train devotees", "infrequent enthusiasts", "train tolerators", "consented car users" and "last resort riders" (Dallen, 2007b). Despite having the same behaviour (i.e. taking the trains to the attraction), visitors demonstrated a complex set of attitudes, perceptions, and activities, which complemented Anable's (2005) study on resident PT users. For instance, the "train devotees" tend to have strong preferences for using the train although they could afford a car. The "train tolerators", do not show much desire for the train but are unable to drive cars.

Lumsdon (2006) and Dallen (2007a, 2007b) have provided valuable information on the complex profiles of PT visitor users in rural areas. However, little is known about the typologies of PT visitor users in a metropolitan area. Anable (2005) clustered the resident PT users near Manchester into "malcontented motorists", "complacent car addicts", "die hard drivers", "aspiring environmenalists", "car-less crusaders", and "reluctant riders". These groups of PT users are distinctive from each other in terms of preferences, worldviews and attitudes, and hence should be addressed differently. This also suggests that there are potentially different motivations behind the same behaviour and that knowledge of motivations for PT use is critical to understanding visitor use of PT.

Barr and Prillwitz (2012) found four groups of urban PT travellers in South West England, namely (1) "addicted car users", (2) "aspiring green travellers", (3) "reluctant public transport users" and (4) "committed green travellers". Aspiring and committed green travellers are those who have pro-environmental attitudes and would consider and use alternative modes whenever possible. The former group comprises younger middle-aged in higher scale occupational level people whereas the latter includes mostly middle-aged people who have managerial or professional occupational background. The "reluctant public transport users" are often older and retired people who have restricted accessibility to the car.

These studies provide some insights into the profile of PT users in urban areas and tourist users of PT in rural areas. However, the visitor users and non-users of PT in cities (especially outside the UK) remain little known. Hence, there is a need to understand urban visitor attitudes towards PT and what motivates them to use or not to use PT. Transport policies and marketing strategies can consequently be planned so as to attract more PT non-users to become choice users. For transport operators, this would increase ridership and revenues. A good destination image could be a result for having an effective and efficient PT system such as in the case of Singapore and San Francisco (Mandeno, 2011). Furthermore, in the case of visitors travelling with a car, successfully