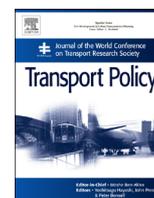




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## Road-based public transportation in urban areas of Indonesia: What policies do users expect to improve the service quality?

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### ABSTRACT

This study investigates the relationship between road-based public transport users' preferences and expectations of particular levels of support and their support of a set of improvement policy scenarios in Indonesia. A series of structural equation modelling estimations was carried out, using empirical surveys among road-based public transportation users in three major urban areas: Jakarta, Bandung and Yogyakarta. The results show that negative experience, service importance and dissatisfaction are factors that significantly correlate with the user preferences in accepting improvement policies along with fare adjustment. The users' travel behaviours and their socio-demographic characteristics were also found to be significant in influencing the degree of such support. However, the results also show discrepancies in the influence of key determinants across the three studied cities, which indicates a need for locally designed approaches.

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### 1. Introduction

Providing public transportation (PT) services that meet users' travel needs and expectations is crucial in creating an inclusive and attractive urban transport system. At the same time, in an era of deregulation and privatisation, it is very important for the transport authority to identify the service quality measurements that really matter for the users. Thus, over the past few decades, there has been a surge in the number of studies concerning assessment of PT services. The studies were aimed at providing clues to improve users' satisfaction and to make the services more user-oriented. For example, see Beirão and Cabral (2007), Friman and Gärling (2001), Friman et al. (2013), Jen et al. (2011), Joewono and Kubota (2007a, 2007b), Lai and Chen (2011), Mouwen (2015), Stradling et al. (2007) and Susilo and Cats (2014).

In the assessment of service quality, investigating feedback from the users about various aspects of service was often conducted. Responses stated by the public, in particular from regular passengers, may be used as a proxy of determinants of current performances and therefore can be utilised to improve existing services. Most previous studies argued that functional, instrumental, or core

service attributes – such as frequency, travel speed, on-time performance – are the most important determinants of travellers' overall satisfaction (Brons et al., 2009; Eboli and Mazzulla, 2012; Mouwen 2015). Traditionally, travel time has been widely regarded as the key performance indicator that would satisfy frequent PT users, among other functional factor attributes (Andreassen, 1995). At the same time, some other studies, such as Stradling et al. (2007), found that non-instrumental variables, such as cleanliness, privacy, safety, convenience, stress, social interaction and scenery play a significant role in influencing traveller satisfaction with their journey. Some studies (e.g. Beirão and Cabral, 2007; dell'Olivo et al., 2010; Diana, 2008; Ettema et al., 2012; Olsson 2012) highlighted the complexity of the impacts and users' social and psychological feedback concerning PT service quality and travel satisfaction. Nevertheless, despite its complexity, Tarigan et al. (2014) argued that providing a satisfactory service is paramount in order to create loyal public transport users.

Many countries, like in Europe, have more advance system where the public transport network is extensive and reliable, and the users have the flexibility to change their mode or route, or even their schedule if they are displeased with the service

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