

First motorcycle than car: Psychological determinants for vehicle purchase decisions

P. F. Belgiawan, J.-D. Schmöcker, & S. Fujii

Department of Urban Management, Kyoto University, Japan

Car ownership levels are increasing rapidly in many developing countries. Increasing income levels allow in particular citizens of the major cities in developing countries to purchase more and larger vehicles. One particular trend of South-East Asian countries is the upgrade process from current motorcycles owners to purchase cars. Van et al (2010) showed that this trend will lead to significantly increasing congestion levels in Hanoi and similarly developments can also be expected in several other major South-East Asian cities. Other negative side effects, such as air and noise pollution, accidents and land-use developments trends are also well known.

In Indonesia and other developing countries this trend towards larger vehicles appears to keep continuing despite the lower average speeds of cars compared to motorcycles in the already congested cities and despite the well observable other environmental side effects. Furthermore, in Jakarta investments in public transport do not seem to have (yet) a significant effect on motorisation (Susilo et al, 2007). This study therefore aims to better understand car purchase motivations of individuals. Comfort is believed to be one reason as well as the role of the car as a status symbol or as a “positional good” (Frank, 2005).

We therefore conduct a survey among students in Bandung, Indonesia to better understand why respondents have bought or want to buy a car. Our survey focuses on undergraduate students, as they often purchase cars within their four years at university. Partly following the work by Steg (2005) on attitudinal factors influencing car usage we investigate the attitude towards cars, aiming to distinguish symbolic/effective, instrumental, social orderliness as well as independence factors.

In the first section of our survey we ask students about their attitudes toward “cars in general” and how that attitude might change after they own one. The survey results allow us to build models that explain the desire to own a car by a) attitudinal factors, b) socio-demographic factors c) travel patterns as well as d) perception of current public transport conditions.

The data was collected during the first two weeks of February this year. There are 500 respondents among which 134 (26.8%) currently possess a car and 222 (44.4%) possess a motorcycle while 197 (39.4%) possess neither. Our data analysis is based on factor analysis as well as regression and structural equation modelling. It is hoped that the research results can give some advice to transport planners on how to influence the current predictions of continuously unsustainable motorisation trends in many cities.

References

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