

ABSTRACT

The Effect of Economic, Social and Psychological Factors on the Transport Behavior of Polish Citizens - A Conjoint Analysis

Approach

[Welte-Bardtholdt, Cordula]

Increasing traffic is responsible for climate change and related problems such as noise and health consequences, and the car is one of the most favored means of transport for individual travel (Haubold, 2014). Thus, traffic should become more sustainable. The objective of the thesis is to investigate to what extent statements made by the respondents about a hypothetical situation correspond to their actual behavior. For this purpose, a conjoint analysis approach will be applied. The EBM model of 1995 (Engel et al. (1995) was chosen as the theoretical basis. Here, the focus was put on the stages "environmental influences", "individual differences", "evaluation of alternatives" and on "choice". Socio-demographic data, information on current travel status, live situation, mental state and experienced feelings while traveling with the current transport mode, and aspects of personality were collected, further, respondents could choose between other transport modes than the car in two hypothetical situations, the non-choice option was also possible. A total of n=918 people participated in the web-based survey, which was conducted in Poland between December 2021 and March 2022. The data was analyzed by Partial Least Square Structural Equation Modeling (PLS-SEM) using SmartPLS V.3. The results show that mental state/experienced feelings while traveling by current mode, transport policy instruments, driver's license ownership, car sharing experience, and gender have a significant influence on transportation mode choice and current travel behavior. Thus, psychological processes are important factors to consider in sustainable transportation planning. The conjoint results showed that public transport and car sharing were the most frequently chosen modes of transport; in the future, policy makers should focus on making these options more attractive. However, one third of the respondents chose the option "no choice/other, so further research would be important here. Furthermore, it could be shown that higher prices for gasoline and parking as well as lower amenities could lead to a switch to other modes of transportation. These and incentives from employers could help to make the switch promising.

Keywords: EBM Model, Choice Based Conjoint, Experienced Feelings, PLS-SEM, Tran