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ABSTRACT BOOK



The goal of this work is to study the relationship among personal psychological factors and the chosen transport mode, using revealed information. A survey was designed and applied in a medium income area in the city of Concepcion, Chile, seizing contextual and psychological aspects which might affect mode choice. The survey design was based upon Triandis' Interpersonal Behaviour Theory, which considers attitudinal, affective, social and habitual factors as precursors of intention, which is mediated by situational conditions to generate behaviour. The neighbourhood was chosen because people in the area have access to both motorised (public and private) and no motorised transport means.

Factorial analysis and structural equation modelling were used to test the original Triandis framework, as well as to find out new relationships among factors, based upon the collected data.

Commuter's Travel Behavior: A Study of Behavioral Intention to Use Bus Rapid Transit in Jakarta

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These studies tried to explain the using of bus rapid transit (BRT) in Jakarta, named Transjakarta. Using, the first corridor of busway, the first study explored the characteristics of Transjakarta 's user (N=748). The second study elicited free responses of commuters who usually use cars to travel to their workplace destination, through interview technique (N= 32). The third study predicted commuters' travel behavior change using behavioral intention model of planned behavior theory (N= 493). It explained how their attitudes toward Transjakarta, the difficulties and easiness for car owner to change to Transjakarta using, how they subjectively perceived the norms of using Transjakarta. Furthermore, the study also explored the relative importance of related variables to public transportation in the mind of car owners using the extension of TPB. The results showed interesting findings. The majority of current Transjakarta users did not contributed from car owners. Only small number of its users came from car users. The modal salient beliefs of commuters using private car implied more negative beliefs. Interestingly, majority of car users tended to have positive attitude toward Transjakarta using, weak subjective norms, but strong behavioral intentions to use Transjakarta. Their intentions were even stronger if Transjakarta was totally convenient. Further results were also discussed.

Psychology and voluntary travel behavior change: is research guiding practice?

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The potential for psychology-based theories of behavior change to aid in promoting active travel modes (e.g. walking, cycling, and transit) is widely recognized among travel behavior researchers. But to what extent is this growing body of research making its way into practice? We investigate this question by evaluating materials from voluntary travel behavior change programs in the United States to determine the extent to which five strategies, identified from the psychology of behavior change literature, are used. These strategies are: increasing personal agency and awareness; targeting of new decision contexts (i.e. recent movers); utilizing injunctive & descriptive social norms; eliciting participant intention and planning (i.e. travel feedback programs); and facilitation of behavior change in the form of incentives. These strategies are identified from previous empirical work incorporating the Theory of Planned Behavior (TPB), including supplemental model components such as habit, the Transtheoretical Model (TTM), and Social Cognitive Theory (SCT). Evidence from a preliminary review of program materials suggests that the biggest areas for improvement in voluntary travel behavior change programs are in the areas of social norms,

intention and planning, and new decision contexts. In closing, suggestions are made for better incorporating these strategies into existing programs.

Considering personal factors into demand discrete choice models. A critical review on tools and measurements

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Since the development of new demand discrete choice models, many studies and research projects have attempted to consider explicitly subjective-psychological factors. Attitudinal, affective, social as well as habitual factors have been measured and incorporated into models using the latent variables approach, which suits well since these factors cannot be objectively measured. In many cases, when looking for theoretical frameworks which sustain the considered factors in the reported studies, it has been found that:

- There is no explicit theoretical framework or
- Definitions and tools related to the measurement of constructs do not appropriately match with the stated theoretical framework.

This work is a critical review of the studies carried out so far on the specification and measurement of latent variables, oriented to capture those psychological factors which might be affecting the mode choice process. The focus is upon the literature generated into the transport demand modelling and data collection fields, looking for recurrent flaws and misunderstandings. A better insight about these problems will allow us to improve the data collection and modelling stage, capturing what we really want to, and permitting a better implementation of transport policy strategies.

Identification and modelling of travel behaviour determinants in order to find successful interventions

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To ease some of the major problems in the field of mobility and transport a change in travel and driving behaviour is needed. At this moment, too many travellers use the car and drive at the same moment in time. In order to change travel behaviour various measures can be taken. However, often one starts with selecting a solution or intervention instead of starting with the traveller and trying to find the best intervention for influencing a specific type of behaviour. If you start with the traveller, it is important to know how he makes his decisions and what sort of underlying mechanisms influence this behaviour. In this paper we will first describe the most important determinants of travel behaviour that came out of a literature review. After this we will describe the implementation of these determinants in a so-called MARVEL model. The working of MARVEL is based on causal relations between system components. With MARVEL the effect of (combinations of) interventions can be shown over time and connections between components will be visible. The paper will end with conclusions on how the work that is described can be used in solving problems in the field of mobility and transport.