The latent effect of inertia in the modal choice

The existence of habit (leading to inertia) in the choice process has been approached in the literature in a number of ways. In transport, inertia has been studied mainly using "long panel" data, or mixed revealed and stated preference data. In these studies inertia links the choice made in two or more periods, but it does not affect the initial choice. In the psychological literature instead, habit is measured only as the number of times the same trip is made using the same mode, but the transport choice is not related to level of service characteristics. In this paper we combine both approaches. We assume that inertia is revealed by past behaviour and affects also the initial condition, but we recognise that past behaviour is only an indicator of habitual behaviour, the true process behind the formation of habitual behaviour being latent. We estimate a hybrid choice model using a set of revealed and stated mode choice preferences collected in Cagliari (Italy). We found a significant latent inertia in the revealed preference data, indicating that inertia affects the initial conditions. The latent inertia is revealed by the frequency of past behaviour but the effect of trip frequency is somehow different from the effect of the habitual use of a given mode, indicating that it is important to distinguish these two effects.

General information
State: Published
Organisations: Department of Transport, Traffic modelling and planning, Università degli studi di Cagliari, Pontificia Universidade Católica
Contributors: Cherchi, E., Meloni, I., Ortúzar, J. D. D.
Pages: 517-534
Publication date: Feb 2014

Host publication information
Title of host publication: Travel Behaviour Research : Current Foundations, Future Prospects
Publisher: Lulu.com
Editors: Roorda, M. J., Miller, E. J.
ISBN (Print): 978-1-304-71517-3
Source: PublicationPreSubmission
Source-ID: 91486054
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014