

The two-phase model of reduce and reuse behaviours

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Introduction

Of the many studies on waste reduction behaviours, few focus on reduce and reuse behaviours, which are very important for the reduction of waste. Therefore, in this study, we investigated the determinants of waste reduction behaviours, particularly reduce and reuse behaviours, on the basis of the two-phase model of environmentally conscious behaviour (Hirose, 1994).

This model integrates the theory of planned behaviour (Ajzen, 1988) and the norm activation model (Schwartz, 1977). The first phase involves deciding on a general goal intention that is, forming pro-environmental attitude to life. The second involves deciding on a specific behaviour intention, effected by evaluations of the environmental behaviour. In this study, we replace the goal intention with personal norm, because a goal intention is not just a desire, but a construct that includes the personal norm to live pro-environmentally.

Methods

In early 2010, we administered an online survey to 1000 residents each from Tokyo, Nagoya, and Osaka, whom we selected using the quota sampling method based on sex and age. Three of the seven kinds of reduce and reuse behaviours were selected: buying refills to reuse containers, with high behavioural frequency; carrying one's own bags so as to consume fewer plastic bags, with middle frequency; and buying foods without foam cartons, with low frequency.

Results

We used structural equation modelling (SEM) to identify the determinants of each behaviour. The findings were as follows: (a) personal norm and benefit evaluation were the main determinants of each behavioural intention; (b) subjective norm and cost

evaluation had little effect on behavioural intention; and (c) the main determinant of personal norm was belief in the effectiveness of each behaviour in reducing waste and preventing global warming. Meanwhile, the strength of the effects of perceived behavioural control on behavioural intention differed among behaviours.

Discussion

Although many studies have reported that subjective norm was the main determinant of environmental behaviours (e.g. recycling), in this study, it had little effect on behavioural intention. The present research suggests the need for employing different approaches to promote reduce and reuse behaviours.

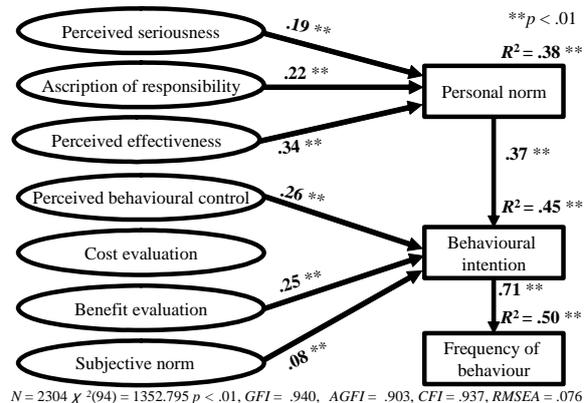


Fig. 1: SEM results about the determinants of behavioural intention when taking one's own bags

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References

Hirose, Y. (1994). Determinants of environment-conscious behaviour. *Japanese Journal of Social Psychology*, 10, 44-55. (in Japanese with English abstract)