

# The inhibiting effect of unintended motivation for wastage on energy conservation behavior

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## Introduction

Previous studies focus on the investigation of the intentional process which promotes energy conservation behavior. However, little research has been conducted to examine the unintentional process which inhibits this behavior. This study used the dual motivation model of environmental behavior (Ohtomo & Hirose, 2007) to examine the inhibiting effect of unintentional component on energy conservation behavior.

The dual process model assumed that two types of motivations determined environmental behavior. The first is behavioral intention, which is conscious deliberation leading to intended eco-friendly behavior, similar to TPB. The second is behavioral willingness, which is a reaction to a situation leading to unintended or unplanned eco-unfriendly behavior. According to the model, behavioral willingness moderates the relationship between intention and behavior.

Our study examined the role of behavioral intention and behavioral willingness in predicting future energy conservation behavior. Moreover, we investigated the effects of cognitive components, i.e., attitude for behavior, injunctive norm, descriptive norm, and perceived behavior control on the dual motivations.

## Method

At time 1, undergraduate participants completed a questionnaire assessing motivational and cognitive components. At time 2, participants ( $n = 90$ ) completed a questionnaire assessing energy conservation behavior over the previous 2 weeks.

## Results and Discussion

Figure 1 showed the result of path coefficients of the model. The fit indexes

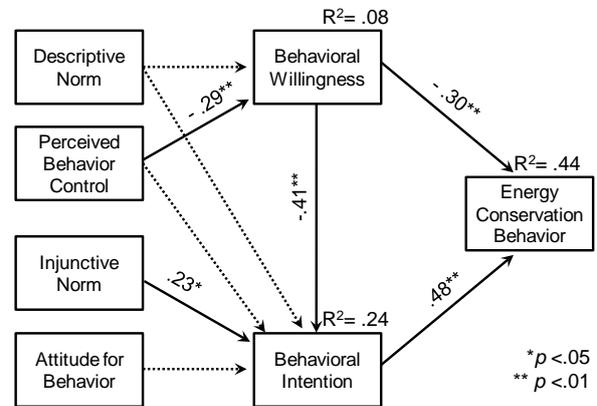


Fig. 1: The structural model of energy conservation behavior

indicated a good fit of the model,  $\chi^2 (10, n = 90) = 8.63$ , n. s., GFI = .97, CFI = 1.00, RMSEA = .00. Both behavioral willingness ( $\beta = -.30$ ,  $p < .01$ ) and behavioral intention ( $\beta = .48$ ,  $p < .01$ ) determined energy conservation behavior. Moreover, behavioral willingness had an inhibiting effect on behavioral intention ( $\beta = -.41$ ,  $p < .01$ ). Thus, the effect of behavioral intention on the energy conservation behavior might be interrupted by behavioral willingness, either directly or indirectly. Then, perceived behavior control affected behavioral willingness ( $\beta = -.29$ ,  $p < .01$ ) and injunctive norm affected behavioral intention ( $\beta = .23$ ,  $p < .05$ ). Descriptive norm and attitude for behavior had no significant impact on any constructs. Hence, behavioral control weakens the unintended motivation which leads energy waste, and behavioral intention is formed by injunctive norm rather than attitude.

## References

Ohtomo, S. & Hirose, Y. (2007). The dual-process of reactive and intentional decision-making involved in eco-friendly behavior. *Journal of Environmental Psychology*, 27, 117-125.