

Review of: "Shopping bags: own or plastic? Theoretical explanation of pro-environment consumer behavior in Vietnam"

Pilar Arroyo¹

¹ Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM)

Potential competing interests: No potential competing interests to declare.

1. In p. 2 the author(s) state

Currently, theory of planned behavior (TPB) has been extensively used to analyze purchase behaviors (THIS STATEMENT REQUIRES A REFERENCE). A study confirmed that purchase intention towards eco-friendly packaging is significantly influenced by personal norms, attitude, environmental concern, and willingness to pay (Prakash & Pathak, 2017) (THE TPB CONSIDERS ATTITUDES, SUBJECTIVE NORM, AND SELF-CONTROL DETERMINE INTENTIONS TO PERFORM ECO-FRIENDLY BEHAVIORS. PERSONAL NORMS, ENVIRONMENTAL CONCERN, AND WILLINGNESS TO PAY ARE NOT CONSTRUCTS CONSIDERED BY THE TPB. THUS, THIS CITATION NEEDS TO BE INCLUDED IN OTHER SECTION. Simultaneously, TPB was used to design an instrument assessing attitudinal, subjective normative, and perceived control beliefs toward consuming milk (Park & Ureda, 1999) (WHAT IS THE RELATION WITH PRO-ENVIRONMENTAL BEHAVIOR).

The author(s) need to discuss separately the three themes: 1) The use the TPB and its extensions to explain pro-environmental behaviors; 2) Extant studies using NAM to explain pro-environmental behaviors; and 3) Previous research on the purchase/preference of environmentally friendly packages, if available.

1. The TPB has been extensively used, therefore, reviews (e.g. Yuriev et al., 2020) need to be cited as well as specific references that use the TPB to predict intentions to buy/use green packages.

Alexander Yuriev, Mehdi Dahmen, Pascal Paillé, Olivier Boiral, Laurence Guillaumie. (2020). Pro-environmental behaviors through the lens of the theory of planned behavior: A scoping review. *Resources, Conservation and Recycling*, 155, 104660, <https://doi.org/10.1016/j.resconrec.2019.104660>.

1. Author(s) must also cite previous works that have merged the TPB and NAM to increase the predictive ability of both models to explain pro-environmental behaviors. See for example:

Savari, M., Damaneh, H.E., Damaneh, H.E. et al. Integrating the Norm Activation Model and Theory of Planned Behaviour to investigate farmer pro-environmental behavioural intention. *Sci Rep* 13, 5584 (2023). <https://doi.org/10.1038/s41598-023-32831-x>

Including references that merge the TPB with other models is not worthwhile. Same case with studies that use TPB and NAM to explain non-pro environmental behaviors.

1. All hypotheses need to be revised, only those directly linked with the “use” or the “choice/selection” of shopping bags should be explicitly stated. The TPB propose the effects of attitude (AT) toward the behavior and subjective norm (SN) on intention are moderated by perception of behavioral control (PBC). Generally, the more favorable the attitude and subjective norm, and the greater the perceived control, the stronger should be the person’s intention to perform the behavior. The author(s) can state this in the text and then propose only six hypotheses, three per each response variable (Y1 = usage of shopping bags, Y2 = purchase of shopping bags). Same suggestion for the NAM.
2. A unique figure (Figure 5) is enough to graphically describe the conceptual model to be empirically evaluated.
3. What valid scales were used to assess all the theoretical constructs? Although TPB and NAM have been widely used it is necessary to describe the source of each scale.
4. Chi-square analysis provided in Table 1 is unrelated to the topic. What needs to be done is to include the control variables in a structural equation model.
5. Structural equation modelling would be the most appropriate approach to analyze the data.
6. Logistic regression is appropriate if the response is in a nominal scale. For example: Do you use shopping bags when going to the supermarket? Yes/No. But according to supplementary Table 1 (why supplementary? Can be an appendix or a main table) the responses were “intention to use” and “intention to purchase”. Then, regular regression can be applied.
7. There is no need to first include the control variables in the regression and then the explanatory variables. All of these variables can be included in the model at once. Declare the control variables as covariates.
8. There is also no need to fit several SEM models, fit the general one. After the logistic regression, it is possible to identify different segments of consumers that prefer to use/buy shopping bags. Then, fit the model of Figure 5 for each segment.
9. The “Conclusion” section needs to be extended. It only summarizes what seems to be the originality or contribution of the study. Academic and practical implications need to be stated. And because other authors (e.g. Savari et al., 2023) have merged the TPB with NAM, then the novelty of the current work is reduced to empirically support the model to the specific behavior of usage/purchase of shopping bags. This is a negligible contribution, the author(s) must develop strong arguments regarding the originality of their research.
10. Finally, English proof is compulsory.