

The role of pride, awareness of consequences and sense of responsibility in sustainable packaging choice

Abstract

The research aims to identify the determinants of purchase intention and willingness to pay towards products with 100% recyclable packaging. An online survey with a sample of 173 Italian consumers was conducted. Using an extension of Schwartz's Norm Activation Model referring to pro-environmental behaviors, a structural model was developed and tested. Results support the NAM's basic assumption. Moreover, intention to buy is influenced by anticipated pride towards the purchase of products with 100% sustainable packaging. Finally, environmental concern strengthens anticipated pride, while environmental knowledge positively impacts on awareness of consequences and ascription of responsibility.

The study offers both theoretical and managerial implications on the importance of personal norms and of the sentiment of pride following a behavior in the purchasing decision-making process. Contextually, knowledge and concern about the environmental problems act as starting points in a causal sequence of relationships that influence purchase intention and willingness to pay.

Keywords: sustainable packaging, Norm Activation Model, anticipated pride, anticipate guilt

Introduction

Consumers today are increasingly attentive to the environmental impact of their purchasing choices. This interest in sustainability has led companies to undertake several actions in various areas: sustainability of the production process, sustainability of raw materials and sustainability of packaging. The latter stands out for importance due to its dual role: on one side, as an element to directly invest to increase its sustainability (new materials, recyclability, reuse); on the other side, as a tool for communicating the company's commitment to sustainability, mainly through environmental claims. With reference to the first role, most of the literature has focused on packaging materials to understand consumers' attitudes and assessments with respect to specific types of materials, such as glass, plastic and tetrapak (e.g., Barber, 2010; Koenig-Lewis et al, 2014; Magnier et al., 2016; Vergura et al., 2020). However, the analysis of general consumers' propensity for sustainable packaging, regardless of the specific material, requires further investigation. Until now, the literature has shown that altruistic and egoistic values positively impact customers' attitude and purchase intention towards products with eco-friendly packaging (Prakash et al., 2019), and that attitude toward recycled and biodegradable products, environmental concern, perceived behavioral control and the individual's moral standards toward the environment influence the intention to purchase eco-friendly packaged products (Prakash and Pathak, 2017; Santos et al., 2021). The present study intends to enrich the knowledge on this topic, analyzing the general propensity of consumers towards sustainable packaging and providing useful information on the role played by this marketing variable in influencing environmental-friendly purchasing behaviors. The research employed an extended version of Schwartz's (1977) Norm Activation Model (NAM), which was often used to understand the determinants of individuals' pro-environmental behaviors, including purchasing of eco-friendly products. In addition to the basic variables, the model was completed with additional variables considered relevant by the literature in forecasting the intention and behavior of purchasing sustainable products.

Conceptual framework

Pro-environmental behavior is considered a type of pro-social behavior since it is guided by altruistic motivations and has positive consequences for the environment and for society as a whole (Kollmuss and Agyeman, 2002; Steg and De Groot, 2010). Those who view pro-environmental behavior as a pro-social behavior often rely on the NAM for analyze it (Bamberg et al., 2007). This model was developed by Schwartz (1977) for the prediction of individual behaviors that are influenced by altruistic and moral beliefs and its validity has been confirmed by various authors also in the context of pro-environmental decisions (e.g., Bamberg and Moser, 2007; Cordano et al., 2011; Han et al., 2014; Onwezen et al., 2013). Schwartz identifies three determinants of pro-social behavior: awareness of consequences (AC), ascription of responsibility (AR) and personal norm (PN). AC indicates the extent to which the individual is aware of the potential negative consequences for others (people or things) when s/he does not act in a pro-social way (De Groot and Steg, 2009). AR concerns the sense of responsibility that the individual connects to the negative consequences of his/her failure to pursue behavior in favor of society or the environment (De Groot and Steg, 2009). PN is defined as an individual's feeling of moral obligation to perform or refrain from specific actions (De Groot and Steg, 2009; Schwartz and Howard, 1981). The norm then translates into specific actions, such as pro-environmental behaviors. Following the first version of the model, which conceives AC and AR as determinants of PN, which in turn determines behavior, this study intends to verify the effect that the awareness of the

environmental damage caused by food products in unsustainable packaging (AC) and the sense of responsibility towards environmental problems caused by the disposal of unsustainable product packaging (AR) have on moral obligation to buy food products in eco-friendly packaging (PN). PN, in turn, is supposed to influence behavioral intention, which is operationalized in terms of both intentions to buy products with packaging that do not harm the environment and willingness to pay more to buy them.

H1: AC positively affects PN.

H2: AR positively influences PN.

H3: PN positively influences (a) the intention to purchase products with a 100% sustainable packaging and (b) willingness to pay.

The NAM framework has been enriched with other predictors to better understand the behavioral intention. More precisely, anticipated pride and anticipated guilt may increase the personal norm and the intention to buy products in sustainable packaging. These emotional components are believed to be able to give greater clarity to the study of people's decision-making process. When an individual must consider whether to act in a certain way, s/he first evaluates the positive or negative emotions that will arise from this action (Onwezen et al., 2013; Perugini and Bagozzi, 2001). This type of anticipated emotion includes, among others, anticipated pride and guilt, which are important for understanding the processes that lead to behaviors within the NAM (Hunecke et al., 2001; Onwezen et al., 2013). If anticipated pride pushes the individual to respect his/her own personal norm, the anticipated guilt encourages him/her not to violate it. In the context of pro-social behavior, anticipated feelings of pride and guilt determine the moral norm (Bamberg and Möser, 2007; Onwezen et al., 2013). This study also assumes that the anticipated guilt or pride for having failed in or having contributed to safeguarding the environment may directly affect the intention to take action.

H4: Anticipated pride towards the purchase of products with 100% sustainable packaging positively influences (a) PN and (b) purchase intention.

H5: Anticipated guilt towards the purchase of products with 100% sustainable packaging positively influences (a) PN and (b) purchase intention.

The last variables included in the model are knowledge and concern for environmental issues. Several studies have highlighted the importance of knowledge in terms of climate change, depletion of water resources and CO₂ emissions with respect to maintaining sustainable behaviors (e.g., Aertsens et al., 2011; Teng and Wang, 2015; Thøgersen et al., 2010), demonstrating how it affects pro-environmental attitudes and behavioral intentions (e.g., Luceri et al., 2021; Tilikidou, 2007; Vicente-Molina et al., 2013). Similarly, concern for the health of the environment has emerged as a determining factor in the adoption of sustainable purchasing and consumption behaviors (e.g., Hedlund, 2011; Maichum et al., 2016; Santos et al., 2021). To the authors' knowledge, empirical evidence about the impact of concern for the health of the environment on anticipated emotions is lacking. On the other hand, knowledge about environmental issues would have a positive effect on the AC deriving from the use of unsustainable packaging and on the AR.

H6: Environmental concern positively affects (a) anticipated pride and (b) anticipated guilt.

H7: Environmental knowledge positively affects (a) AC and (b) AR.

Method

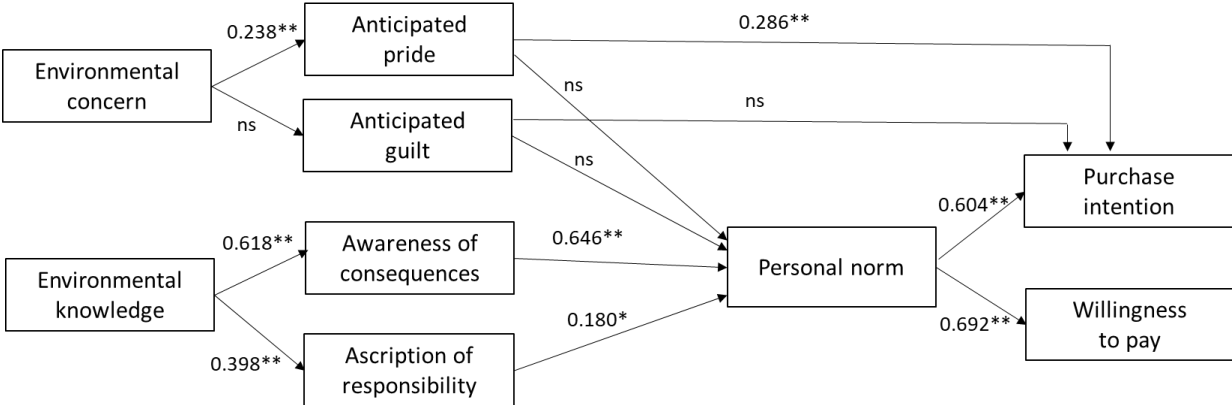
Data was collected by means of a web survey. In total, 173 Italian consumers were reached (71% female, 29% male; mean age = 38.8). Participants were first provided with the definition of sustainable packaging: “A sustainable packaging is created in such a way as to minimize its environmental impact; at the same time, it performs its functions of product protection and information to the consumer in the best possible way”. After that, they were asked to imagine evaluating a product packaged in a 100% sustainable pack.

Latent variables were measured using scales that have been well validated in the literature. All statements were on a 7-point anchored scale. For the analysis of the conceptual model, structural equation modelling (SEM) was performed using the LISREL software (release 8.80).

Results

Results in Figure 1 show that the variables of the original NAM, AC and AR, significantly affect PN ($\beta_{AC}=0.646, p<0.001; \beta_{AR}= 0.180, p < 0.01$), which in turn positively affect purchase intention ($\beta =0.604, p<0.001$) and willingness to pay ($\beta =0.692, p<0.001$) for sustainable packaging. Therefore, the model supports H1, H2 and H3. Anticipated guilt does not influence PN and purchase intention, while anticipated pride only affects purchase intention ($\beta =0.286, p<0.001$): the feeling of pride associated with purchasing a product in sustainable packaging increases purchase intention, thus supporting H4b. On the contrary, H4a and H5 do not find support in the empirical data. A significant relationship also emerged between environmental concern and anticipated pride ($\gamma = 0.238, p<0.001$) as hypothesized in H6a. In other words, concern for the health of the environment increases the sense of satisfaction and pride associated with the choice of sustainable packaging. Finally, as information about environmental problems increases, AC ($\gamma = 0.618, p<0.001$) and AR ($\gamma = 0.398, p<0.001$) for environmental problems caused by unsustainable packaging of food products increase. Therefore, H7a and H7b are supported.

Figure 1. Structural model with standardized coefficients



$\chi^2 = 1017.997, df = 514, p < 0.001, CFI = 0.967, RMSEA = 0.075, NNFI = 0.964, NFI = 0.935$

Discussion

The study confirms the key role of packaging in pursuing the objectives of sustainability. Parallel to the increasing awareness and concern of consumers for issues related to sustainability, the use of sustainable packaging appears as a sensible business choice (Olsen et al., 2014). If consumers perceive a package as sustainable, this would result in positive

emotional responses which will consequently positively influence the intentions to purchase the product.

More specifically, the research supports the hypotheses that the greater the AC and the AR regarding the environmental problems caused by unsustainable packaging of food products, the greater the moral obligation towards the purchase of products with 100% recyclable packaging, which in turn translates in a greater purchase intention and willingness to pay. From the theoretical perspective, the NAM is thus confirmed as an adequate model for the prediction of pro-environmental decisions and behaviors. Contextually, knowledge of environmental issues is able to increase the awareness of the potential negative consequences of purchasing unsustainable packages and the sense of responsibility. Therefore, from the perspective of both businesses and public operators, environmental education appears to be the primary tool for empowering citizens and directing purchasing behavior towards sustainability. In so doing, it should be appropriate to work on raising awareness about the positive consequences of sustainable behaviors and increasing consumers' emotional involvement in environmental issues, especially in terms of pride in having contributed to safeguarding the environment. The anticipated pride is in fact able to positively affect the purchase intentions.

References

- Aertsens J., Mondelaers K., Verbeke W., Buysse J. & Van Huylenbroeck G. (2011), The influence of subjective and objective knowledge on attitude, motivations and consumption of organic food, *British Food Journal*, 113(11), 1352-1378.
- Bamberg S. & Moser G. (2007), Twenty years after Hines, Hungerford, and Tomera: A new meta-analysis of psycho-social determinants of pro-environmental behavior, *Journal of Environmental Psychology*, 27, 14-25.
- Bamberg S., Hunecke M. & Blobaum A. (2007), Social context, personal norms and the use of public transportation: Two field studies, *Journal of Environmental Psychology*, 27, 190-203.
- Barber N. (2010), Green wine packaging: targeting environmental consumers, *International Journal of Wine Business Research*, 22(4), 423-444.
- Cordano M., Welcomer S., Scherer R.F., Pradenas L. & Parada V. (2011). A crosscultural assessment of three theories of pro-environmental behavior: A comparison between business students of Chile and the United States, *Environment and Behavior*, 43(5), 634-657.
- De Groot J.I. & Steg L. (2009). Morality and prosocial behavior: The role of awareness, responsibility, and norms in the norm activation model, *The Journal of Social Psychology*, 149(4), 425-449.
- Han H. (2014), The norm activation model and theory-broadening: Individuals' decision-making on environmentally-responsible convention attendance, *Journal of Environmental Psychology*, 40, 462-471.
- Hedlund T. (2011), The impact of values, environmental concern, and willingness to accept economic sacrifices to protect the environment on tourists' intentions to buy ecologically sustainable tourism alternatives, *Tourism and Hospitality Research*, 11(4), 278-288.
- Hunecke M., Blobaum A., Matthies E. & Höger R. (2001), Responsibility and environment. Ecological norm orientation and external factors in the domain of travel mode choice behavior, *Environment and Behavior*, 33, 830-852.

- Koenig-Lewis N., Palmer A., Dermody J. & Urbye A. (2014), Consumers' evaluations of ecological packaging e rational and emotional approaches, *Journal of Environmental Psychology*, 37, 94-105.
- Kollmuss A. & Agyeman J. (2002), Mind the gap: why do people act environmentally and what are the barriers to pro-environmental behavior?, *Environmental Education Research*, 8(3), 239-260.
- Luceri B., Zerbini C. & Vergura D.T. (2021), Eu Ecolabel: il ruolo delle etichette ambientali nel processo decisionale di acquisto, *Micro e Macro Marketing*, 2, 357-380.
- Magnier L., Schoormans J. & Mugge R. (2016), Judging a product by its cover: Packaging sustainability and perceptions of quality in food products, *Food Quality and Preference*, 53, 132-142.
- Maichum K., Parichatnon S. & Peng K.C. (2016), Application of the extended theory of planned behavior model to investigate purchase intention of green products among Thai consumers, *Sustainability*, 8(10), 1077.
- Olsen M.C., Slotegraaf R.J. & Chandukala S.R. (2014), Green claims and message frames: how green new products change brand attitude, *Journal of Marketing*, 78(5), 119-137.
- Onwezen M.C., Antonides G. & Bartels J. (2013), The norm activation model: An exploration of the functions of anticipated pride and guilt in pro-environmental behavior, *Journal of Economic Psychology*, 39, 141-153
- Perugini M. & Bagozzi R.P. (2001), The role of desires and anticipated emotions in goal-directed behaviours: Broadening and deepening the theory of planned behavior, *British Journal of Social Psychology*, 40(1), 79-98.
- Prakash G., Choudhary S., Kumar A., Garza-Reyes J.A., Khan S.A. & Panda T.K. (2019), Do altruistic and egoistic values influence consumers' attitudes and purchase intentions towards eco-friendly packaged products? An empirical investigation, *Journal of Retailing and Consumer Services*, 50, 163-169.
- Prakash G. & Pathak P. (2017), Intention to buy eco-friendly packaged products among young consumers of India: A study on developing nation, *Journal of Cleaner Production*, 141, 385-393.
- Santos V., Gomes S. & Nogueira M. (2021), Sustainable packaging: Does eating organic really make a difference on product-packaging interaction? *Journal of Cleaner Production*, 304, 127066.
- Schwartz S.H. & Howard, J.A. (1981), A normative decision-making model of altruism. *Altruism and Helping Behavior*, 189-211.
- Schwartz S.H. (1977), Normative Influences on Altruism. *Advances in Experimental Social Psychology*, 10, 221-279.
- Steg L. & De Groot J. (2010), Explaining prosocial intentions: Testing causal relationships in the norm activation model, *British Journal of Social Psychology*, 49(4), 725-743.
- Teng C.C. & Wang Y.M. (2015), Decisional factors driving organic food consumption: Generation of consumer purchase intentions, *British Food Journal*, 117(3), 1066-1081.
- Thøgersen J., Haugaard P. & Olesen A. (2010), Consumer responses to ecolabels, *European Journal of Marketing*, 44(11/12), 1787-1810.
- Tilikidou I. (2007). The effects of knowledge and attitudes upon Greeks' pro-environmental purchasing behavior, *Corporate Social Responsibility and Environmental Management*, 14(3), 121-134.

- Vergura D.T., Zerbini C., Luceri B. & Cristini G. (2020), Environmental sustainability and food packaging. The role of packing material in purchasing decisions, *Sinergie Italian Journal of Management*, 38(3), 149-163.
- Vicente-Molina M.A., Fernández-Sáinz A. & Izagirre-Olaizola J. (2013), Environmental knowledge and other variables affecting pro-environmental behaviour: Comparison of university students from emerging and advanced countries, *Journal of Cleaner Production*, 61, 130–138.