

Mediated Role of New Environmental Paradigm (NEP) Between Environmental Concerns and Students' Green Purchase Behavior (GPB) Interfered by Big-5 Personality

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Abstracts: Human basic needs should be filled with satisfaction in daily life for survival and growth. One of the behavior, in this case, is the ability of the people to consume goods they need, that is why they are called consumers. To satisfy their needs, they have to use their purchase behavior for the transaction, which is called green transaction when they perceive that behavior would be meant to preserve our nature since most of the goods as products derived from the exploitation of nature. That was why this research was urgently conducted to find out the information, on what factors should be considered that affect people's green purchasing behavior (GPB). For this purpose, a causal survey was used by selecting randomly 160 university students as a sample. There were four instruments developed to measure green purchase behavior (reliability was 0.947), environmental concern (rel. was 0.927), students' new environmental paradigm (NEP/rel. was 0.961), and big-5 personality (rel. was 0.972). Data were analyzed by path analysis. The research results revealed that all those exogen variables found affected directly and significantly students' GPB. It was found also the good role of students' NEP which was proven to be highly significant as mediated variable between environmental concerns with students' GPB even though it was interfered with by students' personalities empirically. Therefore, it could be concluded that in developing university campus policies, it is well suggested to involve those factors such as students' environmental concerns, their NEP, and personalities as well to be taken into consideration.

Keywords: Environmental Concern, Personality, New Environmental Paradigm, Green Purchase Behavior, and path analysis.

1. INTRODUCTION

Indonesia is a potential business market. This is because Indonesia has a large population, raw materials, natural materials, human resources, and cheap labor. Rapid business development will have a positive impact on the national economy but will also have a negative impact. Such as environmental damage, scarcity of natural resources, chemical waste, pollution, etc. Consumption activities and human activities will certainly leave a carbon footprint which is the main contributor to the increase in greenhouse gases which of course is the cause of climate change.

Of course, it takes the cooperation of all elements in the world to prevent climate change. One of them is the Sustainable Development Goals. The SDG's goals are to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030. (UNPD, n.d.) Some marketing experts assume that young people care more about the environment than old people. People started to leave products that are not environmentally friendly, this is because they already have good knowledge and information, and 84% of consumers around the world are looking for responsible products. (Making & Brands, n.d.)

Humans depend on nature, therefore they must have environmental awareness, personality, and a new environmental paradigm so that the universe in which we live can provide resources that are used to meet needs ranging from basic, and secondary to tertiary needs. This behavior should be applied on a small scale such as determining the product to be consumed so that the green industry will become an alternative industry chosen by entrepreneurs because there is a market share that will wait for the product. The buying behavior of green products does not only stop when the product is consumed but after it is consumed (post-purchase behavior). Reuse-Reuse-Recycle is one of the behaviors (post-purchase behavior). Reuse means reusing waste that can still be used for the same function or other functions. Reducing means reducing everything that causes waste. Recycling means

reprocessing (recycling) waste into useful new goods or products.

That was why this research should be conducted urgently to manage and educate the people who have bad behavior as a consumer to purchase anything which is beyond our green principles that lead in the wrong direction in trying to save the only one of our planet from destruction. What factors could be considered in directing people's green purchasing behavior was the objective of this research.

2. RESEARCH METHODOLOGY

Related to the objective of this research, a causal survey has been applied by selecting 160 university students, in Jakarta, as the sample. There were four instruments developed to measure students' green purchasing behavior (GPB), environmental concerns, new environmental paradigm (NEP), and big-5 personality all those instruments validated their items' validity and reliability that were all eligible to be used in research. Data were analyzed by path analysis, based on the regression and linearity model of each data pairing.

3. RESULTS AND DISCUSSION

The result of hypothesis testing shows that: (1) There was a direct and significant effect Environmental Concern (X1) on the New Environmental Paradigm (NEP/X3); (2) There was a direct and significant effect Environmental Concern (X1) on Green Purchase Behavior (X4); (3) There was a direct and significant effect Personality (X2) on New Environmental Paradigm (X3); (4) There was a direct and significant effect Personality (X2) on Green Purchase Behavior (X4); (5) There was a direct and significant effect New Environmental Paradigm (X3) on Green Purchase Behavior (X4); (6) There was an indirect and significant effect Environmental Concern on Green Purchase Behavior throughout New Environmental Paradigm; (7) There was an indirect and significant effect Personality on Green Purchase Behavior through New Environmental Paradigm (See in detail below figure). It was found also that its path error coefficient respectively for NEP (X3) was 0.109 meant that around 10 % variance of student NEP was unexplained and followed by path error coefficients of GPB (X4) was around 82.9 % unexplained variances. It meant that there were still a lot of variances required by GPB variances, therefore, for further research is suggested that the researchers could involve as many exogen and endogen variables or by carrying out Structural Equation Modelling (SEM) instead (see below figure for more information). To understand that these results are not stand-alone, therefore, it would be better to be shared here some research results by others to be taken into consideration to look at these results' position among other research findings below in our discussion.

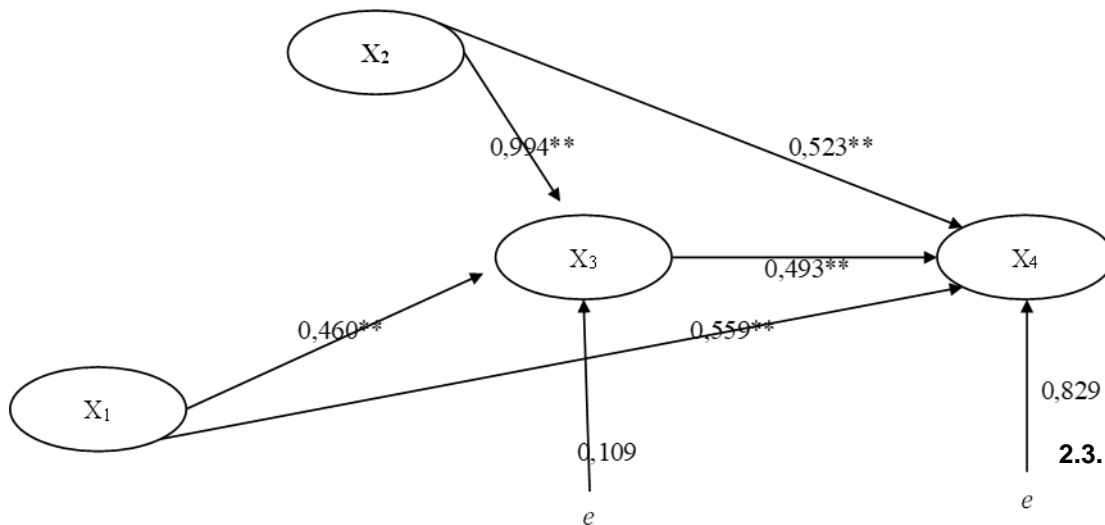


Figure 1: Structural Empirical Model ** P < 0.01

Considering those findings, Backer & Ozaki (2008) found also that there was a relationship between green

products with housewife's pro-environmental beliefs and they prefer to purchase products produced and sold by green companies. Sammer and Wustenhagen (2006) found out that there was a willingness to pay for products that have ecological labeling such as efficient energy used. Another finding related to this research was about switching the use of offline to online purchasing methods as a behavioral change which would affect consumers' behavior in buying something for their needs (Gupta, Bo-Chiuan Su, and Watter (2015).

Stern, Dietz, and Kalof (1993) conducted research that was similar to research by this article, stated that environmental concerns were related to values orientation as well, and found that women have a stronger value orientation such as their biospheric, egoistic, and altruistic compared to men in performing their value orientation which finally would lead to support their likely in improving the quality of our environment. De Magistris and Gracia (2008) used SEM to show their finding that in decision-making to buy organic food products, several factors influenced the ability of consumers to decide whether they wanted to buy or not, namely healthiness, environment, and attitudes.

By applying SEM as well, Chen and Chang (2012) found that green purchase intention is directly affected by green purchase value, green perceived risk, and mediated by green trust. Moreover, relevant to this article's research, Mostafa (2006) found also that there were gender differences in Egyptian Consumers' Green Purchase Behaviour by using a sample of around 1093. Zhou, Thorgersen, Ruan, and Huang (2013) found that there was a good mediated finding of self-transcendence value between attitude and perceived behavioral control on behavioral intention as depicted by the TPB model, as used also by this article's research to support its hypotheses. Moreover, those research findings based on this research article were fully supported by research carried out by Putrawan (2019 and 2020) which also found out the role of students' NEP in predicting pro-eco behavior (Putrawan & Ananda, 2019) and factors such as environmental concerns that derived from VBN model and interfered by big-5 personality in affecting human green purchasing behavior (Putrawan, 2020).

4. CONCLUSION

Based on the above findings, it could be concluded that in trying to predict students' GPB, therefore, those factors could be taken into account such as environmental concerns, students' NEP, and interfered with by big-5 personalities as confirmed from the basis of TPB. That is why this conclusion could be implied that economics should understand and present themselves as ecocentrism, that humans are part of the environment, not separate. Economic activity has become more and more concerned with the environment.

This is because economic activity is not just short-term, but long-term. Environmental problems that continue to emerge today are inseparable from irresponsible production and consumption patterns. For this reason, a commitment to change is needed for producers and consumers through the efficient use of resources. Efficient use of resources is the implementation of Sustainable Consumption and Production.

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Ethical Clearance: None

REFERENCES

- [1] Making, T., & Brands, S. (n.d.). GREENER. UNPD. (n.d.). What are the Sustainable Development Goals? Retrieved From: <https://shorturl.at/ixPRU>
- [2] Almassawi, M. (2014). Promoting green purchase behavior to the youth (case of Bahrain). *British Journal of Marketing Studies*, 2(5), 1-16.
- [3] Aman, A.H Lizawati, Amran H, Zuhail H. (2012). The Influence of Environmental Knowledge and Concern on Green Purchase Intention the Role of Attitude as a Mediating Variable. *British Journal of Art and Social Sciences*. Vol. 7(2) ISSN: 2046-9578.
- [4] Pickett-Baker, J., & Ozaki, R. (2008). Pro-environmental products: marketing influence on consumer purchase decision. *Journal of consumer marketing*, 25(5), 281-293.

- [5] Blend, J.R & Eileen O. V.R (1999). *Measuring Consumer Demand For Ecolabeled Apples*. Nashville: American Agricultural Economics Association.
- [6] Brandao D, L. (2006). Trend and Approach in Lean Healthcare. *Leadership in Health Service*, 22(2), 121-139.
- [7] Boström, M., & Klintman, M. (2008). Eco-standards, product labelling and green consumerism (pp. 17-26). Basingstoke: Palgrave Macmillan.
- [8] Creswell, J.W. (2012). *Research Design: Qualitative and Quantitative Approaches*. CA: Sage Publications.
- [9] Chan, R. Y. (2001). Determinants of Chinese consumers' green purchase behavior. *Psychology & marketing*, 18(4), 389-413.
- [10] Chen, Y. S., & Chang, C. H. (2012). Enhance green purchase intentions: The roles of green perceived value, green perceived risk, and green trust. *Management Decision*, 50(3), 502-520.
- [11] D'Souza, C. (2004). Ecolabel programmes: a stakeholder (consumer) perspective. *Corporate Communications: An International Journal*, 9(3), 179-188.
- [12] D'Souza, C., Taghian, M., Lamb, P., & Peretiatko, R. (2007). Green decisions: demographics and consumer understanding of environmental labels. *International journal of consumer studies*, 31(4), 371-376.
- [13] D'Souza, C., Taghian, M., & Khosla, R. (2007). Examination of environmental beliefs and its impact on the influence of price, quality and demographic characteristics with respect to green purchase intention. *Journal of targeting, measurement and analysis for marketing*, 15, 69-78.
- [14] Gupta, A., Su, B. C., & Walter, Z. (2004). An empirical study of consumer switching from traditional to electronic channels: A purchase-decision process perspective. *International Journal of Electronic Commerce*, 8(3), 131-161.
- [15] Gracia, A., & de Magistris, T. (2007). Organic food product purchase behaviour: a pilot study for urban consumers in the South of Italy. *Spanish journal of agricultural research*, 5(4), 439-451.
- [16] Grunert, S. C. (1993). Green consumerism in Denmark: Some evidence from the ØKO foods-project. *der markt*, 32(3), 140-151.
- [17] Hartmann, P., & Apaolaza-Ibáñez, V. (2011). Consumer attitude and purchase intention toward green energy brands: The roles of psychological benefits and environmental concern. *Journal of business Research*, 65(9), 1254-1263.
- [18] Homer, P. M., & Kahle, L. R. (1988). A structural equation test of the value-attitude-behavior hierarchy. *Journal of Personality and social Psychology*, 54(4), 638.
- [19] Howard, J. A., & Sheth, J. N. (1969). *The theory of buyer behavior*. New York, 63, 145.
- [20] Landon Jr, E. L. (1974). Self concept, ideal self concept, and consumer purchase intentions. *Journal of consumer research*, 1(2), 44-51.
- [21] Lannuzzi, A. (2018). *Greener Product, The Making and Marketing of Sustainable Brand*. Boca Raton: CRC Press Taylor & Francis Group.
- [22] Leire, C., & Thidell, Å. (2005). Product-related environmental information to guide consumer purchases—a review and analysis of research on perceptions, understanding and use among Nordic consumers. *Journal of Cleaner Production*, 13(10-11), 1061-1070.
- [23] De Magistris, T., & Gracia, A. (2008). The decision to buy organic food products in Southern Italy. *British food journal*, 110(9), 929-947.
- [24] Mostafa, M. M. (2007). Gender differences in Egyptian consumers' green purchase behaviour: the effects of environmental knowledge, concern and attitude. *International journal of consumer studies*, 31(3), 220-229.
- [25] O'Cass, A. (2000). An assessment of consumers product, purchase decision, advertising and consumption involvement in fashion clothing. *Journal of economic psychology*, 21(5), 545-576.
- [26] Olsson, P., & Folke, C. (2001). Local ecological knowledge and institutional dynamics for ecosystem management: a study of Lake Racken watershed, Sweden. *Ecosystems*, 4, 85-104.
- [27] Pedersen, E. R., & Neergaard, P. (2005). Caveat emptor—let the buyer beware! Environmental labelling and the limitations of 'green' consumerism. *Business strategy and the Environment*, 15(1), 15-29.
- [28] Philip J. K. (2009). *Marketing Management*. PE: Prentice Hall Higher Education.
- [29] Prothero, A. (2010). Green consumerism and the societal marketing concept: marketing strategies for the 1990's. *Journal of Marketing Management*, 6(2), 87-103.
- [30] Indonesia, K. P. R. (2015). *Rencana Induk Pembangunan Industri Nasional 2015-2035*. Pusat Komunikasi Publik Kementerian Perindustrian. Jakarta.
- [31] Putrawan, I., & Ananda, R. (2019). A Mediated Role of Students New Environmental Paradigm (NEP) Between Environmental Personality and Pro-Eco Behavior. *Indian Journal of Public Health Research & Development*, 10(1).
- [32] Putrawan, I.M (2020), Students' Values-Belief-Norm (VBN) Model Interferred by Environmental Big-5 Personality, *Journal of Advanced Research in Dynamical & Control System*, Vol. 8 (12), 197-202.
- [33] Rahbar, E., & Wahid, N. A. (2011). Investigation of green marketing tools' effect on consumers' purchase behavior. *Business strategy series*, 12(2), 73-83.
- [34] Rex, E., & Baumann, H. (2006). Beyond ecolabels: what green marketing can learn from conventional marketing. *Journal of cleaner production*, 15(6), 567-576.
- [35] Röling, N. G., & Jiggins, J. (1996). The ecological knowledge system. In *Proc. 2nd European Symp. on Rural and farming systems research: technical and social systems approaches to sustainable rural development*. Granada, Spain (pp. 116-120).
- [36] Sammer, K., & Wüstenhagen, R. (2006). The influence of eco-labelling on consumer behaviour—Results of a discrete choice analysis for washing machines. *Business strategy and the environment*, 15(3), 185-199.
- [37] Sarumathi, S. (2014). Green purchase behavior—a conceptual framework of socially conscious consumer behavior. *Global Journal of Finance and Management*, 6(8), 777-782.
- [38] Schultz, P. W. (2000). New environmental theories: Empathizing with nature: The effects of Perspective taking on concern for environmental issues. *Journal of social issues*, 56(3), 391-406.
- [39] Schiffman, L. G & Joseph W (2015). *Consumer Behaviour 11th edition*. USA: Pearson Education.

- [40] Thøgersen, J., Haugaard, P., & Olesen, A. (2010). Consumer responses to ecolabels. *European journal of marketing*.
- [41] Vermeir, I., & Verbeke, W. (2006). Sustainable food consumption: Exploring the consumer “attitude–behavioral intention” gap. *Journal of Agricultural and Environmental ethics*, 19, 169-194.
- [42] Walsh, G., & Mitchell, V. W. (2010). Consumers' intention to buy private label brands revisited. *Journal of General Management*, 35(3), 3-24.
- [43] Zhou, Y., Thøgersen, J., Ruan, Y., & Huang, G. (2013). The moderating role of human values in planned behavior: the case of Chinese consumers' intention to buy organic food. *Journal of consumer marketing*.
- [44] Kim, Y., & Choi, S. M. (2005). Antecedents of green purchase behavior: An examination of collectivism, environmental concern, and PCE. *ACR North American Advances*.
- [45] Young, W., Hwang, K., McDonald, S., & Oates, C. J. (2009). Sustainable consumption: green consumer behaviour when purchasing products. *Sustainable development*, 18(1), 20-31.

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