

IN QUEST FOR DETERMINANTS OF POLES' SUSTAINABLE BEHAVIORS: THE ROLE OF PERCEIVED CONSUMER EFFECTIVENESS AND PERCEIVED DIFFICULTY

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Abstract

The necessity of consumption evolution towards more sustainable patterns seems to be obvious in the light of possibility of attaining sustainable development goals being officially introduced in international public policy in 1980s and fueled by the initiatives undertaken by such organizations as UN, World Bank or EU. Irrespective to the fact that this notion is still evolving, in microeconomic scale sustainable consumption (SC) manifests itself through certain sustainable behaviors (SBs) that should be commonly adopted by consumers not only in affluent societies but also in developing countries. The process of implementing sustainability into everyday consumers' life as well as the factors encouraging or limiting sustainable behaviors became an interesting subject of academic research. The number of research projects in this field additionally increased since there has been revealed the discrepancy between positive consumers' attitudes towards sustainability rules and their later unsustainable behaviors (attitude-behavior gap).

This article is aimed at explaining the role of two factors i.e. perceived consumer effectiveness (PCE) and perceived difficulty (PD) in the process of forming sustainable behavior. PCE has been already identified in literature as an incentive playing significant role in environmentally conscious behaviors while PD has gained less researchers' interest. So far none of mentioned factors was examined as a variable influencing sustainable behaviors of Poles. To achieve assumed goal, we made use of the outcomes of quantitative research (online survey) being conducted in 2016 among 1112 Polish consumers.

Keywords: sustainable consumer behavior, perceived consumer effectiveness, perceived difficulty of sustainable behaviors

Introduction

The concept of sustainable consumption (SC) first emerged at the United Nations Conference on Environment and Development (widely known as the Rio Summit or Earth Summit) organized in Rio de Janeiro in 1992 as a direct consequence of decoupling consumption and production issues within discussions on sustainable development [Schrader and Thøgersen, 2011, pp. 3-8; Sedlacko et al., 2012, pp. 20–42]. The official definition of this term was introduced in 1994 during Oslo Symposium on Sustainable Consumption. Participants of this UN gathering agreed to define sustainable consumption as “the use of services and related products, which respond to basic needs and bring a better quality of life while minimizing the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardize the needs of future generations” [Norwegian Ministry of the Environment, 1994]. Although this definition gathered the greatest popularity in sustainability literature we claim that an essence of SC was better described by a concept of environmental

space (ES) broadly developed by Spangenberg [2002, p. 297]. ES mirrors a certain range of consumption possibilities which are restricted by environment capacity to recreate natural resources from the top (so called “ceiling”), and by the minimum resource accessibility that permits leading a dignified life in a given society from the bottom (so called “floor”). In consequence, SC includes all the free choices being made within available environmental space i.e. in between the borders of social and environmental sustainability [Spangenberg, 2014, p. 63]. This reasoning leads to the conviction that individuals can contribute significantly to achieving long-term sustainability goals by adopting sustainable behavior patterns. Accordingly, researchers seek to explain which behaviors can be identified as sustainable ones, how often do consumers undertake them in their everyday life as well as to uncover what makes consumers to behave in sustainable way and what stops them from behaving such. In the field of consumer behavior, it resulted in numerous attempts of both describing patterns of SBs and indicating factors that underlie them. The largest number of empirical investigations has been focused only on chosen types of sustainable behaviors and only few authors like McDonald and Oates [2006] or Papaoikonomou [2013] have been conducting their research with respect to the broader range of SBs, thus have represented so called holistic approach to SBs issue. Following this approach this article considers a whole set of SBs which may be observed in case of Polish consumers. Our main goal is to disclose and assess the impact of perceived consumer effectiveness (PCE) and perceived difficulty (PD) on particular SBs types. The analyses have been purposely restricted to these two psychological factors since their influence on sustainable consumer behaviors had been already proofed in the course of research conducted in Western countries.

PCE was introduced by Kinnear and his co-authors in the context of ecologically concerned consumers. They defined perceived consumer effectiveness as “a measure of the extent to which a respondent believes that an individual consumer can be effective in pollution abatement” [Kinnear et al., 1974, p. 21]. Further research in this field allowed to formulate more general definitions that may be applied not only to describing pro-environmental behaviors but also to investigating premises of sustainable ones. Accordingly, Ellen et al. stated that PCE should be understood as “domain-specific belief that the efforts of an individual can make a difference in the solution to a problem” [Ellen et al., 1991, p. 103]. Taking this broader angle, a significant body of research concluded that PCE has a potential to shape sustainable behaviors in both direct and indirect way [e.g. Roberts, 1996; Straughan and Roberts, 1999; Lee and Holden, 1999; Jang et al., 2015, Heo and Muralidharan, 2017]. Second variable – perceived difficulty of sustainable behavior, did not get such a big research interest as the first one. Admittedly PD concept emerged already at the beginning of 1990s, but initially it was utilized mainly in psychological deliberations and, as a such, was combined rather with the overall mechanism of human behaviors than with their specific cases like sustainable ones. When analyzing Ajzen’s TPB concept [Ajzen, 1985; 2012] Trafimow and coauthors [2002] concluded that the variable known in this model as perceived behavioral control (PBC) consists in fact of two components and perceived difficulty is one of them. They defined PD as “the extent to which individual perceives the difficulty of performing the behavior”. Having utilized TPB to describe determinants of ethical consumer behaviors Chatzidakis and coauthors [2016] have empirically proofed that perceived difficulty (treated by them not as a component of PBC but as an independent variable) is a significant factor which allows to predict intention. They concluded that the more difficult is given behavior the weaker is individual's intention to behave in this way.

Methods

The starting point of all the calculations were data resulted from online survey conducted among 1112 Polish consumers in 2016. Firstly, we created a theoretical model of SBs which was subsequently transformed into empirical one, i.e. the one reflecting consumers' point of view and their real activities. To do so we utilized exploratory principal component analysis (PCA) with Varimax rotation which allowed to classify sustainable behaviors into 5 groups namely frugal/non-consumption behaviors, conscious buying, active behaviors involving social interactions, buying ecological (green) products, active behaviors with no need of social interactions. Secondly, we conducted multiple regression analysis across the five behavioral categories to find the explanation of our research problem i.e. to disclose an existence of relationship between PCE/PD and frequency of sustainable behaviors and to describe a character of such relationship.

Results

The outcomes of regression analysis confirmed the existence of statistically significant, linear relationship between assumed predictors and response variable (coefficient of determination i.e. R-squared turned to be significant concerning all groups of behaviors). It means that changes in PCE and PD values are related to changes in frequency of Polish consumers' sustainable behaviors. The results of F-tests are as follows: in case of frugal/non-consumption behaviors $F(2,11107)= 385,932$, $p \leq 0,01$, in case of conscious buying $F(2, 11104)= 109,279$, $p \leq 0,01$, in case of active behaviors involving social interactions $F(2,1102)= 101,484$, $p \leq 0,01$, in case of buying green products $F(2,1102)= 95,055$, $p \leq 0,01$, in case of active behaviors with no need of social interactions $F(2,1100)= 126,053$, $p \leq 0,01$. Achieved model (models) is shown in figure 1.

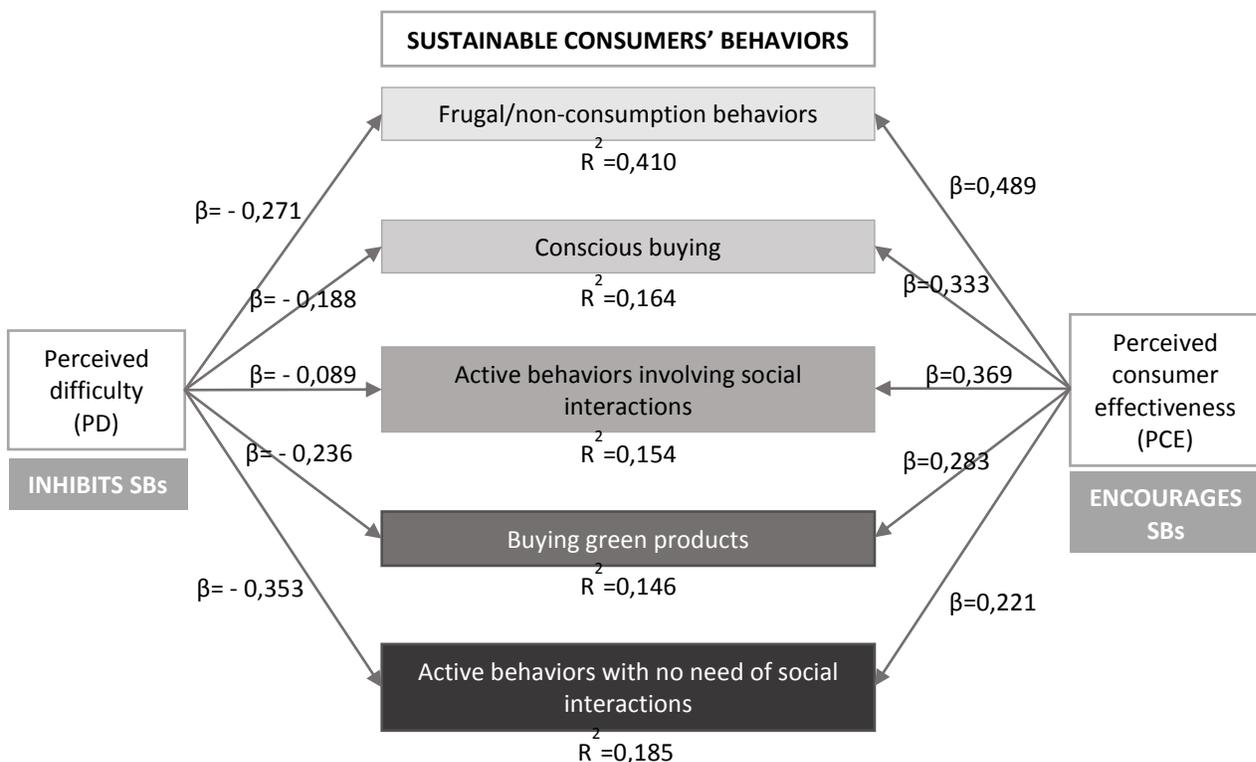


Figure 1. Model of PCE and PD influence on the frequency of Poles' sustainable behaviors in regarding to identified types of such behaviors. *Source: Own elaboration.*

Depending on the SBs type the predictors account for different percentage of the variance which indicates that the changes in frequency of researched SBs types emergence are significantly influenced also by other factors which were not included in current model (models). Furthermore, the values of regression beta coefficients show that both PCE and PD turned to be significant predictors of frequency in case of each SBs type. The signs of beta coefficients indicate that PD is concerned as an obstacle to Poles' sustainable behaviors while PCE fosters sustainable behaviors and generally speaking PCE effects SBs frequency to the greater extent than PD.

Conclusions

Conducted analyses proofed the expectations that, similarly to the consumers in affluent countries, Poles perceive and assess effectiveness and difficulty of their sustainable behaviors. Both researched factors have an impact on the SBs frequency, but the strength of PCE and PD influence differs according to the sustainable behaviors type and considered variables can not be treated as reasons of sustainable behaviors appearance. Since the outcomes of this study clearly show that PCE and PD are only two of numerous possible determinants of Polish consumers' SBs there is an obvious need to continue the research on this topic. Future investigations should be aimed at finding the remaining factors which drive Poles to behave in sustainable way or impede such behaviors.

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