

The Reasons Behind Sustainable Product Purchases. What Affects Consumers More – Cognition or Emotions?

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Abstract. More and more scientists are pointing to the need for sustainable consumption research in order to find an effective way to promote sustainable products among consumers. Scientists note that sustainable consumption is often illusory. The research shows that consumers have a positive attitude towards sustainable products, but that does not always correlate with actual consumers' purchasing behaviour. Accordingly, the question arises of how to promote consumers to buy sustainable products. Recent theories in the field of decision-making, such as Dual Processing theories, place increasing importance on emotional response. The aim of this article is to investigate the emotional and cognitive factors that affect consumers' intentions to buy sustainable products. Based on theoretical aspects, a model that examines the intersection between the emotional and cognitive responses on consumers' intentions to buy sustainable products is proposed.

Keywords: *sustainable products, sustainability marketing, emotional response.*

Introduction

Relevance of the article

Sustainability is one of the most relevant topics of the 21st century among science, politics, business organisations, and society at large. The growing relevance of the sustainability topic is closely linked to various unresolved global problems, such as growing environmental pollution, climate change, scarcity of natural resources, and others. The relevance of the topic is also shown by the growth of scientific publications on this topic every year (Meschede, 2020; Elsevier, 2015). Meanwhile, unsustainable patterns of production and consumption that do not take into account the needs of the global community and future generations are cited in scientific articles as one of the main causes of these problems (Sheth, & Parvatiyar, 2020). Therefore, the promotion of sustainable consumption is becoming an increasingly important topic.

Level of problem investigation

The analysis of the scientific literature revealed that in order to explain consumer behaviour related to the consumption of sustainable products, researchers have applied a wide range of theories, but only few of them examine the emotional response factor. In the context of the consumption of sustainable products, Ajzen's (1991) Theory of Planned Behaviour has been most commonly used (Quoquab, & Mohammad, 2020), but the conducted studies provide contradictory results (Sheth, & Parvatiyar, 2020; Menzel, 2013). Meanwhile, researchers studying ethical consumption, which is very close to sustainable consumption, point out that traditional models of consumer behaviour (such as Ajzen's (1991) Theory of Planned Behaviour), which are dominated by a rational and cognitive approach, are not entirely suitable for predicting ethical consumption behaviour, because consumers' emotional response plays an important role (Magnusson et al., 2003). Also, recent theories in the field of decision-making and neuroscience, such as Evans & Stanovich's (2013; 2019) Default-Interventionist Theory, state that a person's emotional and cognitive responses interact strongly with each other and both of them might contribute to decision-making (Okon-Singer, Hendler, Pessoa, & Shackman, 2015). However, existing research does not reveal in which cases the consumer's emotional response and in which cognitive response has a greater influence on the purchase of sustainable products.

Scientific problem

How do emotional and cognitive responses influence consumer intention to purchase sustainable products?

Object of the article – the impact of emotional and cognitive responses on consumer intention to purchase sustainable products.

Aim of the article – to investigate the emotional and cognitive factors that affect consumers' intentions to buy sustainable products.

Objectives of the article:

1. To analyse the theories used in explaining sustainable consumption and the main theoretical aspects related to them.
2. To define the cognitive response factors and their influence on the consumer's intention to purchase sustainable products.
3. To define the emotional response factors and their influence on the consumer's intention to purchase sustainable products.
4. Based on theoretical aspects, to create a model that examines the intersection between emotional and cognitive responses on consumers' intentions to buy sustainable products.

Methods of the article

Analysis, synthesis, classification, theoretical modelling.

1. Theoretical aspects related to sustainable consumption

In order to explain consumer behaviour related to sustainable consumption, researchers have applied a wide range of theories, but only few of them examine the importance of emotional response. Quoquab & Mohammad (2020) performed an analysis of scientific articles on the topic of sustainability published in 2000–2020 to see what theories have been applied. The analysis showed that only one article used Stimulus-Organism-Response Theory that analyses the emotional response factor. Stimulus-Organism-Response Theory states that an external stimulus affects an individual's internal emotional state, which in turn causes a reactive response. Early proponents of this theory argued that emotional response is reactive, affects the consumer physically, and is not under volitional control (Nyoni, & Bonga, 2017). However, recent theories in the field of neuroscience suggest that not only the stimulus affects the emotional response, but also a person's existing knowledge, attitudes, and unconscious arousal influence the emotional response to the stimulus (LeDoux, & Brown, 2017). Piligrimienė, Žukauskaitė, Korzilius, Banytė, & Dovalienė (2020) were among the first to apply the Stimulus-Organism-Response Theory in the context of sustainable consumption and found that emotional engagement in evaluating sustainable products is more important than cognitive engagement. Thus, although the influence of emotional response on consumer behaviour and decision-making is not widely explored, there is growing evidence that it can be highly important.

Among all theories, Ajzen's (1991) Theory of Planned Behaviour, which explains sustainable consumption is the most commonly used (Quoquab, & Mohammad, 2020). In the Theory of Planned Behaviour (Ajzen, 1991), the attitude towards the object or towards the action is considered the main factor that can predict the individual's behaviour (Ajzen, 1991). In academic practice, this model is often used because it provides an opportunity to determine how different attributes influence consumer attitudes and subsequent behaviour (Pichauri, 2001). However, other researchers criticise the author of the model for overestimating the cognitive abilities of consumers – the assumption that consumers in a real purchase situation are able to evaluate all important attributes before making a purchase decision (Bagozzi, Gurhan-Canli et al. 2002 cited in Bray, 2008). Meanwhile, researchers studying sustainable consumption notice that there is an attitude-behaviour gap between consumer attitudes towards sustainable products and behaviour. Research shows that consumers have a positive attitude towards sustainable products, but tend not to buy them (Menzel, 2013, Shet, & Parvatiyar, 2020). The researchers point out that attitudes towards sustainable products do not correlate with actual consumer purchasing behaviour. Thus, there is evidence that attitude does not necessarily determine or explain consumer behaviour.

In the scientific literature's field of neuroscience there is an indication that in everyday life, consumers often make decisions under the influence of automatic processes that are driven by an emotional response. The Dual Process Theories separate automatic processes, often referred to as the first system, which is fast, unconscious, and driven by emotional response, from reflective processes, often referred to as the second system, which is slower, conscious, and related

to available knowledge, motivation to act and feelings (Evans, & Stanovich, 2013; Evans, 2019). Over forty years, the academic world has developed a dozen theories of the dual process, which differ in their explanations of how the first and second systems work (Kahneman, 2003; Gawronski, & Bodenhausen, 2006, etc.). However, among all of the dual process theories, Evans & Stanovich's (2013; 2019) the Default-Interventionist Theory, according to other authors, best corresponds to the current understanding of the brain in neuroscience (Gronchi, & Giovannelli, 2018; Kruglanski, 2013). The authors of the Default-Interventionist Theory argue that when people make decisions, the first system makes a quick and automatic suggestion. Meanwhile, the role of the second system is to observe the default response suggestion provided by the first system. If the second system determines that this default response suggestion is good enough, it is executed. However, if the second system is motivated and has sufficient knowledge and reasoning abilities, it also has the power to intervene and perform a more deliberate response. The main difference between Evans & Stanovich's (2013; 2019) theory and other dual process theories is that the Default-Interventionist Theory does not strictly separate the processes of the two systems. This is consistent with the results of research by neuroscientists, who found that a person's emotional response, cognitive knowledge and abilities strongly interact with each other and together contribute to decision-making (Okon-Singer et al., 2015). Thus, although in the context of sustainable product marketing, the influence of emotional response on consumers' intentions to purchase sustainable products has been studied very narrowly, previously conducted studies in the general field of decision-making point to this factor as extremely important in the decision-making process.

Starting to analyse the emotional response, it is important to notice that there is no clear consensus among researchers on one specific definition of emotional response. Often, the terms emotional response and feelings are used as synonyms, especially in marketing research (Prescott, 2017; Poels, & Dewitte, 2019). However, the rest of this paper will follow the definitions of emotional response and feelings provided by neurobiologists Damasio & Carvalho (2013). These researchers state that emotional response is the body's physiological reaction to external stimuli, while feelings are the individual's conscious interpretation of the emotional response experienced (Damasio, & Carvalho, 2013). The metaphor of an iceberg is often used to describe the difference between emotional response and feelings. It symbolises that when human bodies respond to an external stimulus, the emotions they experience may be so subtle that a person may not consciously perceive them, but a reaction still occurs in the human body. Meanwhile, feelings are only the tip of the iceberg, and only when the reaction of the human body is strong enough, feelings become perceived and available for interpretation. The literature suggests that emotional response is a multidimensional construct consisting of valence, measured as negative or positive, and arousal, measured as high or low (Lang, 1995; Posner, Russell, & Peterson, 2009). Therefore, emotional response primarily affects the consumer physiologically through its two dimensions of arousal and valence that can influence the consumer's behaviour quickly and unconsciously, that is, without the user's cognitive awareness of it.

2. Empirical investigation level of the impact of emotional response on consumer intention to purchase sustainable products

The importance of emotional response in the context of sustainable consumption research is growing. Pilgrimienė et al. (2020) found that consumers are more likely to be emotionally engaged in sustainable consumption compared to cognitive and behavioural engagement, whereas consumers with higher overall engagement are more likely to buy environmentally sustainable products. These results are also supported by Lee, Choi, Han, Kim, Ko, & Kim (2020) study, in which researchers used functional magnetic resonance imaging (fMRI) to find that environmental labelling increases activation of the anterior cingulate cortex, which is involved in the control of attention, affecting both cognitive and emotional processes. Thus, the research results of these studies confirm the importance of emotional response in the context of sustainable consumption, but the number of studies that examine how emotional response affects consumer behaviour related to sustainable consumption is extremely limited (Pagan et al., 2020). Pagan et al. (2020) conducted a systematic

analysis of scientific articles that used psychophysiological research methods to measure emotional response in the context of sustainable consumption and revealed that there is only one study that examines the impact of psychophysiological emotional response on sustainable consumption. Meanwhile, researchers emphasise that it is important to study how emotional response affects consumers' intention to buy sustainable products (Ladhari, & Tchegnna, 2015).

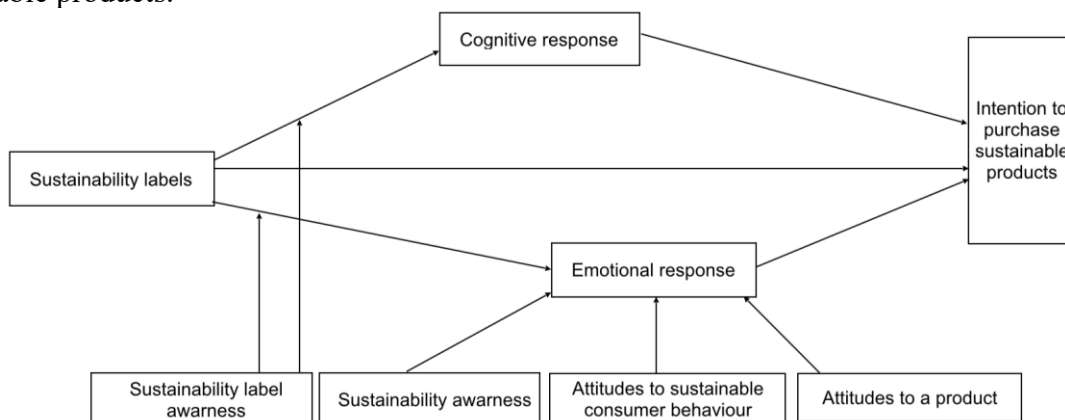
Research shows that products with sustainability labelling are able to evoke an emotional response. Songa et al. (2019) in their study aimed to determine whether products with a recycling label on the packaging evoke a greater emotional response than products with non-recycling labelling. The results of the facial expression capture equipment showed that packaging with recycling labelling evoked higher positive valence in consumers than packaging with non-recycling labelling. The fact that sustainable products evoke a more positive valence in consumers is also confirmed by research conducted using subjective questionnaires (Gutierrez et al., 2020; Schouteten, Gellynck, & Slabbinck, 2019). Meanwhile, Maccioni et al. (2019) measured skin conductance and pupil dilation in their study to determine whether environmentally friendly products caused greater arousal compared to a control product group but found no significant difference. One of the reasons for such results could be that in their study, sustainability was not expressed through labelling, textual, or any other information, and consumers had to decide for themselves whether the product was sustainable only from the picture of the product package. Thus, while research on emotional arousal is contradictive, research on emotional valence suggests that environmentally sustainable products and labelling evoke more positive valence.

Research shows that emotional response affects consumers' intention to purchase sustainable products. Gutierrez et al. (2020) found that the emotional response of positive valence affects consumers' intention to purchase environmentally sustainable products. Researchers found that the more positive the valence, the higher the consumer's intention to purchase the products (Gutierrez et al., 2020). Authors who investigated the effect of emotional response on consumers' intention to purchase socially sustainable products also found that positive valence affects consumers' intention to purchase sustainable products (Ladhari, & Tchegnna, 2017). Meanwhile, researchers who studied the influence of both positive and negative valence on consumers' intention to purchase products with organic packaging found that both negative and positive emotional responses influence the intention to purchase sustainable products – a positive emotional response to the product positively influences the intention to purchase, while the negative emotional response has a negative impact on purchase intention (Koenig-Lewis, Palmer, Dermody, & Urbye, 2014). However, it is important to note that in the cases of these three reviewed studies, the emotional response was measured in relation to the products and not in relation to the advertisement associated with them. Hur, Lee, & Stoel (2020) conducted a study to determine how a positively and negatively valenced picture and message in an advertisement for a socially sustainable product affect consumers' intention to pay more for sustainable products. Researchers found that similarly to cause-related advertising, consumers are willing to pay more for a socially sustainable product when the ad features a negatively valenced picture and message (Hur et al., 2020). Thus, although research shows that emotional response affects consumers' intention to buy sustainable products, the current level of research on the topic does not allow us to identify precisely in which cases more positive valence, and in which cases more negative valence affects consumers' intention to buy or pay more for sustainable products.

Previous research suggests that a consumer's cognitive appraisal of a situation may be necessary to evoke an emotional response. Research shows that consumers' attitudes towards sustainability and concern for environmental issues can affect how strong and what kind of emotional response sustainable products cause. Songa et al. (2019) study found that people with prior positive attitudes toward recycling noticed a recyclable label on product packaging more quickly and spent more time processing the label, which in turn led to higher arousal. Thus, the results of this research show that consumers' attitudes influence both attentional focus and emotional response. However, a scientific experiment conducted by Balconi et al. (2019), in which researchers sought to determine the extent to which sensitivity towards sustainable issues influences the evaluation of luxury sustainable

fashion products, showed conflicting results. Balconi et al. (2019) using EEG found that consumers who were sensitive to sustainability topics and consumers who were not sensitive to sustainability topics showed equally significant emotional involvement when evaluating luxury sustainable fashion products. Also, this study revealed that a group of consumers who were not sensitive to the topic of sustainability had a greater emotional response to sustainability-related stimuli than a group that was sensitive to the topic of sustainability (Balconi et al., 2019). The researchers believe that this may be because the information may have been new to a group of consumers who were not sensitive to the topic of sustainability. Another reason why Songa et al. (2019) and Balconi et al. (2019) results are contradictory may be that Songa et al. (2019) investigated consumer response to sustainability labelling, which is a less emotional response-sensitive stimulus, while Balconi et al. (2019) used sustainability-related pictures, which is a more emotional response-sensitive stimulus, to study consumer response. Meanwhile, Koenig-Lewis et al. (2014) studied the influence of concern about environmental problems and the cognitive benefits of ecologically responsible packaging on consumers' emotional responses. The researchers found that those consumers who had a high concern for environmental issues and a high cognitive perception of the benefits of ecologically responsible packaging experienced a more positive emotional valence caused by the ecologically responsible product packaging (Koenig-Lewis et al., 2014). Thus, research results reveal that consumers' preconceived attitudes and knowledge can influence emotional response, but existing research is insufficient to generalise in which cases cognitive information affects consumers' emotional response and in which cases it does not.

Returning to this article question – what affects consumers in the context of sustainable product purchases more – cognition or emotions – is still unknown. Based on the insights of the researchers presented in the article, a conceptual model (Fig. 1) is presented. As a basis for the conceptual model, The Default-Interventionist Theory is used. The theory states that a person's emotional and cognitive responses interact strongly with each other and both of them might contribute to decision-making. Therefore both cognitive and emotional response factors are included in the model in order to identify how they both influence consumers' purchase intentions of sustainable products. And since there is evidence that consumer cognitive information might affect the emotional response, factors such as attitudes to a product, attitudes to sustainable consumer behaviour, and sustainability awareness are included in the model. Special attention is given to the sustainability label awareness factor, which as hypothesised switches the button between cognitive and emotional responses. Therefore, integrating all of these factors will provide a more complete picture of the underlying mechanism of how emotional and cognitive responses affect consumer's intention to purchase sustainable products.



Source: created by the author.

Fig. 1. Conceptual model

Conclusions

1. The analysis of the theories used in explaining sustainable consumption revealed that the consumption of sustainable products has mostly been studied based on a cognitive approach to consumer behaviour with very limited consideration of the emotional response impact. While recent theories in the field of decision-making such Default-Interventionist Theory suggest that in everyday life, people are more likely to make decisions under the influence of an automatic system that is controlled by an emotional response rather than a cognitive system.
2. The analysis of empirical research showed that a significant relationship between emotional response and intention to purchase sustainable products exist, while cognitive factors such as positive attitude and knowledge provide contradictory results. Also, scientific literature has revealed that the knowledge a consumer has and the formed attitude affects the emotional response.
3. The created conceptual model is based on theoretical and empirical aspects. It shows that both emotional and cognitive responses might influence consumers' purchase intentions. The model suggests that the sustainability label awareness factor influences whether the cognitive or emotional response factor is more activated. Also, the model shows a close relationship between emotional response and sustainability awareness, attitudes to sustainable consumer behaviour, and attitudes to a product.

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