

Sustainability and Consumer Behaviour

LITERATURE REVIEW

Helen Vaikma (helen@tftak.eu)

FOREWORD

This document is the outcome of a literature review on sustainability and consumer behaviour within the context of fast-moving consumer goods. Helen Vaikma from ESN member TFTAK worked with the ESN community to identify the most relevant research questions to help provide a focus future work in this area.

The literature review was completed in 2021 and is now published by ESN and available to download from the ESN website.

All care has been taken to ensure accuracy in the information provided in this literature review. ESN holds no responsibility for the correctness, completeness or quality of the information provided.

Citation Format

Vaikma, H. (2022). Sustainability and Consumer Behaviour: Literature Review. Published by the European Sensory Network (ESN).

Further Information on ESN

Website: <https://esn-network.com/>

TABLE OF CONTENTS

INTRODUCTION	3
MATERIALS AND METHODS	5
RESULTS AND DISCUSSION	6
RQ1: What does sustainability mean to consumers?	6
RQ2: How do consumers estimate their climate/environmental impact?	6
RQ3: How does sustainability impact the overall consumer experience?.....	8
RQ4: How do different aspects (raw material, production technologies, packaging, brand image) impact behaviour/purchase decisions in relation to sustainability in context of food, household chemicals, personal care products?	9
Raw materials.....	9
Production.....	10
Packaging	10
Labelling	11
Brand.....	12
RQ5: How have consumers been educated towards sustainable consumption? What are the best strategies for communication? What are the best gaps for strategies?	13
How have consumers been educated towards sustainable consumption?.....	13
What are the best strategies for communication?.....	13
What are the best gaps for strategies?.....	17
RQ6: How can companies become more sustainable from a consumer-relevance standpoint?	18
RQ7: How does greenwashing affect consumer behaviour?	21
CONCLUSIONS	23
LIST OF REFERENCES.....	24

INTRODUCTION

Sustainability is a relatively new term first introduced in 70-80s, but has been gaining more interest ever since (Caradonna, 2014) as demonstrated also on Figure 1. Policymakers seek to find ways in which society can function even more sustainably than before. For example, focus on providing a sustainable future has been set by the United Nations General Assembly (2015) as the 2030 Agenda for Sustainable Development (A/RES/70/1). European Union has also adopted this framework by following the Sustainable Development Goals as part of the UN's agenda.

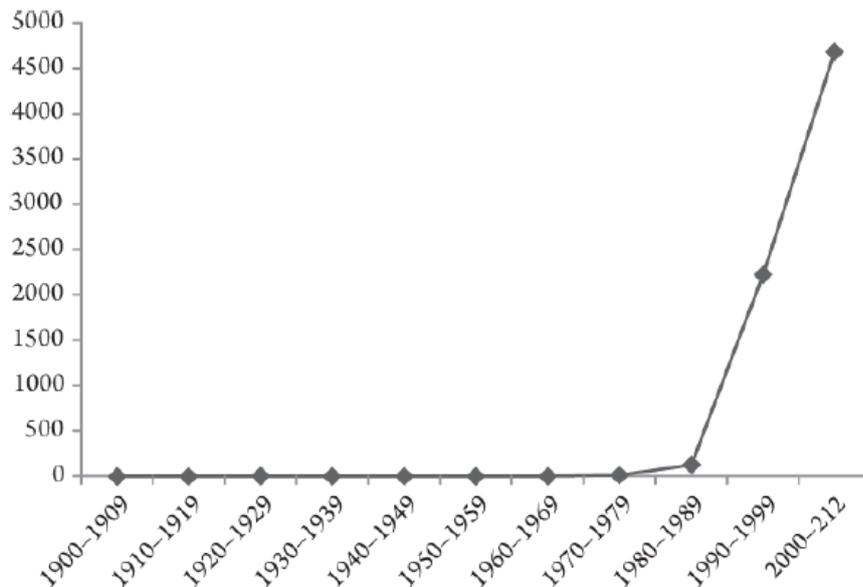


Figure 1. Books published between 1900–2012 with “sustainable”/“sustainability” in the title (Caradonna, 2014)

Sustainability is most often categorized into three different dimensions: environmental (the planet), social (people), and economic (profit) (Calderon-Monge et al., 2020). However, some studies have included other dimensions as well. Specific concept behind sustainability depends on the specific field. For example, including health dimension as a fourth dimension in sustainable nutrition (Koerber et al., 2017), or having a novel five-dimensional framework (three dimensions of space, permanence, persons) in policymaking (Seghezze, 2009).

As sustainability is still a relatively new concept, the discussions on how to communicate sustainability continue. The question remains how to motivate people to make more sustainable decisions. This has also initiated discussions among ESN members in various meetings. The present literature review is based on specific research questions that were formulated on ESN committee meeting (June 2020), and includes the following three themes:

Theme 1: consumer perception

- RQ1: What does sustainability mean to consumers?
- RQ2: How do consumers estimate their climate/environmental impact?
- RQ3: How does sustainability impact the overall consumer experience?

Theme 2: purchase decisions

- RQ4: How do different aspects (raw material, production technologies, packaging, brand image) impact behaviour/purchase decisions in relation to sustainability in context of food, household chemicals, personal care products?

Theme 3: communication on the topic of sustainability

- RQ5: How have consumers been educated towards sustainable consumption? What are the best strategies for communication? What are the best gaps for strategies?
- RQ6: How can companies become more sustainable from a consumer-relevance standpoint?
- RQ7: How does greenwashing affect consumer behaviour?

MATERIALS AND METHODS

Literature review was conducted based on research questions mentioned above. The search engine used for this purpose was ExLibris Primo, which enables exploration of e-resources for which Tallinn University of Technology has open access to; for this topic, most accessed repositories included ScienceDirect, Wiley Online Library, EBSCOhost, Emerald Insight, and MDPI. Search process was filtered to find only peer-reviewed articles and all articles had to be published in English. Chosen journals were preferably focused on consumer behaviour, marketing, and business research; however, depending on the RQ, journals specialised in other areas were included as well.

Keywords used for the search process referred to the consumer behaviour combining it with specific words such as: "consumer" OR "customer" AND "experience" OR "perception" OR "behaviour" OR "estimating impact" OR "meaning" AND "purchase" OR "consumption" AND "sustainability" OR "pro-environmental" OR "climate" OR "environment" AND "concern" AND "consumer environmental attitude" AND "perceived consumer effectiveness" AND "detergents" OR "personal care products" OR "hygiene products" OR "cosmetics" OR "household chemicals" OR "food" AND "packaging" OR "brand image" OR "production technology" OR "ingredients" OR "raw material" AND "green-washing" OR "green advertising" OR "green marketing" NOT "clothing" NOT "tourism" NOT "services" NOT "healthcare".

Articles included in the review were original studies, preferably published in 2016-2021. If the search results exceeded 500 articles, then only the first 500 were examined. In total, 2586 abstracts were evaluated in accordance with the aforementioned search processes. The initial list of references was compiled based on abstracts, using the criterion that the topic should be related to at least one of the Research Questions. The process resulted in a list of 185 publications. Subsequently, publications that were not related to any RQ based on full text were further excluded. Meaning that 20 publications were excluded from the initial list, resulting a total of 162 references included in the literature review.

The references were grouped under different Research Questions and were divided as following: 13 papers for RQ1, 35 papers for RQ2, 16 papers for RQ3, 50 papers for RQ4, 82 papers for RQ5, 51 papers for RQ6, and 20 papers for RQ7. Surely, one paper could be grouped under multiple RQ-s. The distribution of papers to different RQ-s also seems to hint what topics are most researched, and what topics need to be further investigated.

Papers were categorized by topic according to the following classifications: general, food, personal care products (i.e. hygiene products, cosmetics), household chemicals (i.e. detergents). Some papers included multiple topics and were grouped into multiple categories. Table 1 gives an overview of the distribution of topics that different articles were divided to. Most articles discussed the topic of sustainability generally (78%). Many studies were related to food research (17%) as well. Personal care products (7%) and household chemicals (3%) were less investigated, which may also hint at the current research gap within these topics.

Table 1. Distribution of publications based on topics

Topics	No	%
General	125	77
Food	28	17
Personal care products	12	7
Household chemicals	5	3

RESULTS AND DISCUSSION

RQ1: What does sustainability mean to consumers?

Studies suggest that consumers do not fully understand the meaning behind the term sustainability, and this is indicated even among consumers who see themselves as motivated by sustainable intentions (Schiano et al., 2020; Uren et al., 2019). In addition, meaning of sustainability can be varied among consumers from different countries and consumers of different food categories (Sánchez-Bravo et al., 2020). Level of education and age have the greatest impact on perception of sustainability (Sánchez-Bravo et al., 2020, Sánchez-Bravo et al., 2021), which implies that consumers need to be educated to help them to understand sustainability on a deeper level (see also RQ5). For example, study by Sánchez-Bravo et al. (2021) demonstrated that consumers who had higher level of education and who were aged between 24-52 years, were also more likely to agree with basic knowledge sustainability statements.

Nevertheless, multiple studies have demonstrated that sustainability is most often associated with the environmental dimension (Gao et al., 2020; Simpson & Radford, 2012; Stancu et al., 2020). Environmental aspects can be linked with reducing greenhouse gas emissions (Schiano et al., 2020) environmental protection (Diprose et al., 2019; Roy et al., 2015), efficient production (Lehner, 2015), consumption and waste reduction (Lehner, 2015; Simpson & Radford, 2012), energy use (Stancu et al., 2020), recycling (Roy et al., 2015), buying local/seasonal (Lazzarini et al., 2017; Lehner, 2015). However, consumers have difficulties in green behaviour as they are not sure what green consumption is (Beatson et al., 2020). In general, sustainable behaviour may be expressed in restrictive behaviours, specific purchasing behaviours, prolonging the life of products, or disposal behaviour (Stancu et al., 2020). However, environmental sustainability is not just about protecting the environment from human destruction, but about maintaining human's quality of life (Uren et al., 2019).

Consumers may perceive environment as a foundation for other sustainability dimensions (Stancu et al., 2020). For example, green products are often associated more with health than with environment (Witek, 2019). Consumers also often mention the social and economic side of sustainability, although these also depend on the environment and are less prominent in terms of dimensions (Diprose et al., 2019; Simpson & Radford, 2012). For example, the consumption of domestic food is considered to be environmentally friendly and socially sustainable compared to the consumption of imported food (Lazzarini et al., 2017). Social dimension of sustainability is often related to ethical aspects such as human labour and working conditions (Stancu et al., 2020), human wellbeing (Diprose et al., 2019), animal welfare (Schiano et al., 2020). Economic dimension refers to economic stability, such as collective consumption and preservation of public services (Diprose et al., 2019).

RQ2: How do consumers estimate their climate/environmental impact?

As it was previously discussed in RQ1, consumers mostly associate sustainability with the environmental aspect. However, making environmentally sustainable choices is challenging for the consumers. Not only do consumers have difficulty engaging in sustainable actions, but also understanding their own environmental impact. For example, a literature review by Hartmann and Siegrist (2017) about sustainable protein consumption reveals that consumers underestimate the environmental impact of meat production and consumption. However, one longitudinal study among these shows that consumers have become more aware of meat's impact on the environment ($M_{2010} = 3.89$, $SD = 1.69$; $M_{2014} = 4.23$, $SD = 1.56$; $p < 0.001$). In plant-based food context, consumers

overestimate the environmental impact of seasonality, and underestimate other environmental factors such as transportation distances (Lazzarini et al., 2017).

Paper by K. Lee (2014) discusses that environmental attitude describes individuals' value judgement for sustainability efforts (related to cognitive and rational assessment), whereas environmental concern refers to personal worries and compassion about the environment (related to emotional and affective cues). Adult's purchasing decisions are mostly based on rational and cognitive cues (compared to teen's emotional and affective cues) and therefore, adults make purchasing decisions rather based on environmental attitudes than environmental concern. Meaning that green purchase behaviour is shaped by the purchase intention, which is related to attitudes towards green products (Wei et al., 2017). Environmental attitude may be perceived as an attitude towards the environment in general (GEA) and as an attitude towards specific environmental behaviour (SEA) (Shatnawi & Chin, 2019). SEA and GEA both have positive effect on consumer attitudes toward environment (Taufique et al., 2016). Further, when individual acquires pro-environmental behaviour as an accepted social norm, the actual behaviour may also differ because of unfavourable environment (e.g. low availability of products, lack of confidence in green products, high prices) (Witek, 2019). Shatnawi and Chin (2019) demonstrate that SEA has a stronger effect on behaviour than GEA, which means that attitude-behaviour gap is more related to specific behaviour attitudes rather than general environmental issues.

Study by Emekci (2019) demonstrates that attitude is a combination of environmental knowledge (EK), environmental concern (EC), and perceived consumer effectiveness (PCE). Many studies conclude that environmental concern (EC) has a positive effect on purchasing decisions (Butt et al., 2017; Malik & Singhal, 2017; Nekmahmud & Fekete-Farkas, 2020; Song et al., 2020; Wahab et al., 2017). On the contrary, some have argued that the EC is not involved in purchasing behaviour, proposing that environmental knowledge/awareness (EK) may be even more important (Heo & Muralidharan, 2019; Setyawan et al., 2018; Tandon et al., 2020). Findings suggest that the more knowledgeable the consumer is, the higher is the concern for the environment (Heo & Muralidharan, 2019), the more positive attitude (Ghose & Chandra, 2020; Khan et al., 2020) and the more likely they will make the purchase decision (Goh & Balaji, 2016; Nia et al., 2018; Uddin & Khan, 2018). Knowledge and awareness also can help to understand environmental benefits of their actions (Beatson et al., 2020). PCE has shown to have the strongest influence on attitude, and therefore, sustainable purchasing (Emekci, 2019) and consumption (Y. Joshi & Rahman, 2019). However, having more EK does not increase PCE, implying that knowledge alone does not increase consumers' belief that sustainable behaviour has enough impact on the environment (Heo & Muralidharan, 2019). This also supports the findings by Shatnawi and Chin (2019) that SEA has more important role in environmental behaviour than GEA.

Onel (2017) suggests that personal norms are more important than subjective norms (social environment), therefore, consumer awareness should be focused on marketing. Attitudes can be manipulated by using different tools that help the consumers in assessing their environmental impact. For example, consumer attitudes may be increased through external product attributes (Martino et al., 2019). Using specific labels can support the attitude formation through EC (Cerri et al., 2018; Song et al., 2020). Labels can also help consumers to understand the effect of their purchasing decision to the environment (D'Souza et al., 2021; H. Wang et al., 2019), which in turn can help to increase PCE (Song et al., 2020). More EK can increase confidence and trust towards green products, which is also mediated by PCE (H. Wang et al., 2019). It is important to note that environmental behaviour may not transfer similarly to other contexts (Groening et al., 2018), which must be kept in mind when investigating consumers estimation of their environmental behaviour. For example, Royne et al. (2016) demonstrated that recycling behaviour is highly important in food-related behaviour, but water consumption activities do not depend on specific category and only depend on differences in ethnicity and age.

Positive attitude towards social and environmental accountability can be positively related to purchase of environmentally sustainable products (Mandliya et al., 2020). Luchs et al. (2015) add that consumer responsibility for sustainable consumption is a predictor of behaviour. However, positive attitude alone does not bring high perception of personal responsibility. There is an interactive effect between responsibility and attitude. Conducted survey with Slovenian consumers confirmed that environmental concerns lead to higher sense of responsibility and familiarity with eco-products (Hojnik et al., 2019). On the contrary, another survey with Indonesian consumers showed that sense of responsibility influenced purchase intention of green products negatively (Arlı et al., 2018). Moreover, self-directed people seem to behave based on environmental concern when they have high perception of their own sustainability behaviour (Pekkanen et al., 2018). Consumers also use various information components on the products to estimate their impact on sustainability as it is discussed under RQ4.

RQ3: How does sustainability impact the overall consumer experience?

Introjected regulation is a motivator that can favour attitudes and behaviour towards sustainability, taking into account both positive and negative consequences (Tandon et al., 2020). On one hand, sustainable decisions can promote a sense of pride (Uren et al., 2019) and moral satisfaction (Steenis et al., 2018). On the other hand, guilt (Hwang & Kim, 2018), anger and fear may also lead to different behavioural patterns (Singh et al., 2018) in sustainability scenarios. Positive emotions influence sustainable behaviour more strongly than negative emotions (Armstrong et al., 2019; Rezvani et al., 2017; Venhoeven et al., 2020). Negative emotions (e.g. guilt) can lose effectiveness, especially when the issues seem distant for the consumer (Kim et al., 2016). In addition, positive emotions are more meaningful when the act is made volitionally (Venhoeven et al., 2020).

Emotions like awe, empathy and moral elevation may predict sustainable consumer behaviour (White et al., 2019). Consumers are satisfied from their actions if they believe that they are contributing to solving environmental and social problems (J. Wang et al., 2020). From the social aspect, some consumers may feel that engaging in sustainable practices can gain social approval (Uren et al., 2019). In other cases, they may be proud to be different from others by their sustainable choices (*Ibid.*). Although they may feel unfulfilled if they are not able to live up to the expectations of others if they are perceived as a role model in a specific social environment (Longo et al., 2019). In addition, even when the consumer is positively tuned to sustainable products, it may be negatively associated with lower product quality (i.e. durability, taste) than the conventional product, resulting a negative purchase decision (Mai et al., 2019).

On the other hand, sustainable consumption may be a source of tension and distress when social, structural and personal pressure starts to hinder sustainable behaviour (Longo et al., 2019; Valor et al., 2018). Consumers will use coping strategies (e.g. distancing, social support) to alleviate distress, but if other mechanisms are not effective they may also reconfigure their commitment (Valor et al., 2018). Reconfiguring can be described as “deradicalization”, meaning that the consumer will change the practice of sustainability by reinventing their personal commitment level (*Ibid.*). In other cases, negative emotions can also act as a motivator in sustainable behaviour. For example, guilt can lead to self-growth through empathy and, finally, lead to purchase intention (Hwang & Kim, 2018). It is also important to understand how specific consumers solve their inner conflict (i.e. moral dilemma) through moral disengagement and efficacy (Sharma & Lal, 2020). In less intense moral situations, emotions have less impact, whereas in high intense situations fear and anger can lead to new patterns (Singh et al., 2018).

Another aspect that Farmer et al. (2017) bring out from their taste-test survey with undergraduate students is that sustainable products can lessen consumption (measured by weight/volume of the tested food product). Further, the decrease in consumption is especially high for people with better self-control. Since it is not known whether the reduction of consumption extends to non-food items as well, there is room for further studies in the future. Authors suggest that this tendency originates from prosocial focus, which emphasizes the needs of other people. Meaning that they will consume less on a greater cause. Helping others can provide a positive feeling called a “warm glow” effect (White et al., 2019). Also, consumers who have social trust tend to engage more in sustainable behaviours, since they believe that other people will also avoid actions that can cause adverse situations for others (J. Wang et al., 2020). In conclusion, it seems that sustainability can decrease consumption, and on the flip side, it can motivate people to engage more as a social behaviour.

RQ4: How do different aspects (raw material, production technologies, packaging, brand image) impact behaviour/purchase decisions in relation to sustainability in context of food, household chemicals, personal care products?

Raw materials

Van Giesen and Leenheer (2019) conducted an experimental field study with visitors of Supermarket of the Future at the World Expo Milan. They investigated how consumers turn attention to different information components, i.e. price, nutritional values, origin of raw materials, organic logos, sustainability logos, carbon footprint. The results demonstrated that consumers with sustainable pre-task tended to pay more attention to origin of raw materials from all the sustainability information, and respondents without sustainable pre-task paid equal attention to all sustainability information components. However, all consumers valued price, nutritional values, and the origin of raw materials the most. The importance of raw material origin is also demonstrated with other studies. In addition to a food product’s sensorial attributes, Brazilian beef consumers turn attention to food safety attributes like knowledge of animal origin and production processes (Burnier et al., 2020). Sustainable consumers in Germany claim that they mostly avoid products with palm oil (Hinkes & Christoph-Schulz, 2019), though interviews with consumers in UK indicate that despite their knowledge, they won’t stop consuming products with palm oil (Aguiar et al., 2018). A survey by Witek (2019) with Polish consumers showed that, in general, consumers are interested in green products that are safe for health. Meaning that the products are produced with natural ingredients (no pesticides, hormones, allergens, preservatives, food colourings, GMO); and high-quality products that are even enriched with ingredients with positive health effects.

On the example of Polish consumers, green products are mostly perceived as green food, having less awareness about other types of products like household chemicals (detergents) and personal care products (cosmetics) (Witek, 2019). However, findings from Amberg and Magda (2018) with US and European consumers show that consumers of cosmetics are directed to health and environmental consciousness. The demand for plant-based products decreases demand for other cosmetic products. Consumers are mostly looking for products with natural ingredients produced free from chemicals (Ayob et al., 2016; Song et al., 2020). A conjoint study with laundry detergents even implies that raw materials are the most important attributes together with the price (Jo & Shin, 2017). However, it is important to note that consumers of household chemicals and personal care products are not well aware of different harmful substances (S. Hartmann & Klaschka, 2017). Many consumers in Malaysia assume that natural personal care products are free of harmful ingredients, and this tendency is even among consumers with good self-reported knowledge of chemistry (Ayob et al., 2016). As natural and chemical ingredients both have its pros and cons, there must be regulatory action to ensure safety as well as efficacy of products (*Ibid.*). Another important factor may also be a limited time spent for a

purchase decision, e.g. consumers may have an immediate preference for products with palm-oil since it is a natural ingredient, even though palm oil has a negative sustainability image (Aguiar et al., 2018). All in all, ingredients are one of the most important attributes for food as well as personal care products (Liobikienė & Bernatoniene, 2017).

Production

Lazzarini et al. (2017) conducted a survey in Switzerland asking consumers to rate the sustainability of different food products (apples, peppermint, bell peppers), which in turn varied by country of production. The study suggested that information about the country of origin is used to evaluate sustainability. For example, the environmental impact was assessed as the lowest for all the local variants of the products presented. In practice, however, local does not always mean a more sustainable option. In the case of local vegetables, production system and seasonality are just as important from an environmental point of view. For example, based on a study with Swedish consumers, organic production is often associated with the use of locally available renewable resources and use of waste/by-products (Bosona & Gebresenbet, 2018).

Organic food production is often associated with sustainable food production, and organic food is perceived as having higher quality (Bosona & Gebresenbet, 2018; Sánchez-Bravo et al., 2021). High quality foods are regionally, sustainably, and organically produced, whereas product's appearance, price and uniformity are less important for the perception of quality (Bosona & Gebresenbet, 2018). Organic products may even be associated with health benefits (Sánchez-Bravo et al., 2021) due to the possible health-halo effect (Farmer et al., 2017). Thus, organic food production can be associated with environmental sustainability as well as health sustainability. In addition, food products that are handmade, can also be perceived as more natural and with higher authenticity (Frizzo et al., 2020).

For non-food products, organic production is as important as it is for food-products. A study by Amberg and Magda (2018) suggested that as consumers are more interested in natural cosmetics due higher health and environmental consciousness, the products that are made organically are seen as a more natural product for the consumer. In general, concern over production processes can affect consumer's attitude and intention to buy different products, as it was shown on the example of sustainable beef consumers (Burnier et al., 2020). However, research and education is needed to understand more how sustainability and (organic) production relate to each other (Bosona & Gebresenbet, 2018).

Packaging

Generally, visual cues and packaging have an important effect on the impression of product's sustainability (Eberhart & Naderer, 2017). "Green" exteriors impact perception of sustainability positively (Petersen & Brockhaus, 2017) as green colour and botanical images on packaging create a perception of naturalness (Kahraman & Kazançoğlu, 2019). Further, experiments by Marckhgott and Kamleitner (2019) with US students have shown evidence that matte surfaces are perceived as more natural than glossy surfaces. On the contrary, degree of glossiness can positively affect perceived product quality and attractiveness (Briand Decré & Cloonan, 2019). Packaging affects the perception of naturalness only when there are no stronger signs of naturalness – products that itself are perceived as natural, are not affected by the coating (Marckhgott & Kamleitner, 2019). In other words, visual cues signal sustainability more strongly than material choices as the material gives away only vague information (Petersen & Brockhaus, 2017).

Consumers associate environmental sustainability also with the end of product's life cycle, such as recyclability, biodegradability, or reusability (Herbes et al., 2018). Steenis et al. (2018) categorize sustainable packaging solutions by technical cycles (like recycling), biological cycles (like biodegradability), and linear reduction strategies (like reducing). Steenis et al. (2018) also surveyed Danish consumers by conducting an experiment in the form of an article on a website about plastic

bottles and an online shop page for a shower gel product. Results indicated that sustainable packaging design (compared to conventional packaging) was favoured due to circular improvements in the packaging design. More specifically, consumers prefer biodegradable packages made from non-renewable resources more than non-biodegradable packages made from renewable resources (Herbes et al., 2018). Another study with Australian consumers further suggests that even though public's knowledge of biodegradable plastics is low, they are recognized as more environmentally sustainable than conventional plastics or recyclable plastics (Dilkes-Hoffman et al., 2019).

Although study by Steenis et al. (2018) demonstrated that any sustainable redesign in packaging can increase purchase intention, another study by Prakash et al. (2019) implies that packaging has a different impact depending whether the consumers have altruistic motives (environmental concern) or egoistic motives (health concerns). Altruistic motives tend to have a stronger effect on favouring eco-friendly packaging, however, both motives have positive influence on purchase intention. The packaging design preferences of the consumers may be also different depending on the country. For example, German consumers focus on reusability, whereas French and US consumers focus on recyclability (Herbes et al., 2018).

Labelling

Labels are used as indicators for many products, however, consumers have difficulties in deciphering all the information that labels tend to indicate (Beatson et al., 2020). For example, organic and fair-trade labels can both be perceived as environmentally and socially sustainable (Lazzarini et al., 2017), which sometimes can also have a health halo effect (Farmer et al., 2017). Eco-labels may communicate health and environmental consciousness both (Nassivera & Sillani, 2017). It is also an option to label products by their production method. For example, handmade label on the packaging promotes perceived naturalness and authenticity (Frizzo et al., 2020). Labelling is also important for non-foods such as personal care products, similarly, giving indications on sustainability (Eberhart & Naderer, 2017). There are many acknowledged certificates for non-foods, such as Cosmebio (France), BDIH (Germany), COSMOS (COSMetics Organic Standard) (Amberg & Magda, 2018).

Some consumers claim to consider label information when making their purchase decisions, and some claim that they do not turn attention to labels as there are more important factors for them, e.g. price (Eldesouky et al., 2020). A study with Australian university students demonstrated that most consumers occasionally read eco-labels (Martino et al., 2019). Education level of the consumer also influences attitude towards labels. Educated consumers are generally more informed and more sensitive to environmental problems, whereas less-educated consumers are not interested in sustainability labels and are more sensitive on brand reputation (Mancini et al., 2017). If consumers have higher PCE, they also have higher willingness to purchase (Liang et al., 2020) as they are more ethically/environmentally conscious and open to label information (Ghvanidze et al., 2016). An experiment with Swedish university students also suggests that rational green claims influence individuals with high processing ability/low levels of distractions and emotional green claims influence individuals with low processing ability/high levels of distractions (Agerup et al., 2019). Further, it is more difficult to attract consumers who are sceptical towards labels (Cho & Taylor, 2020). For example, trust in Fair Trade label influences consumers' willingness to buy Fair Trade products (Konuk, 2019).

Nevertheless, experiment by Agerup et al. (2019) showed that purchase propensity of products (cognitive likelihood of buying) is significantly higher for products with green claims than with neutral claims. Also, products with emotional green claims have higher purchase propensity than with rational green claims. Multiple studies demonstrate that labels can positively influence sustainable behaviour by increasing the purchase intention (D'Souza et al., 2021; A. R. de A. Silva et al., 2017), environmental attitudes (Cerri et al., 2018; Chin et al., 2018; Nassivera & Sillani, 2017; Song et al., 2020; Taufique et al., 2016), environmental concern (Chin et al., 2018; Song et al., 2020), perceived consumer

effectiveness (H. Wang et al., 2019), self-confidence (D'Souza et al., 2021), and in case of food products, even the perception of sensory quality (A. R. de A. Silva et al., 2017). External CSR (corporate social responsibility) labels can also affect the purchase intentions (Gosselt et al., 2019), which will be further discussed in RQ7.

Brand

Brand experience plays an important role in green behaviour. Based on a study in Taiwan, green brand experiential satisfaction has a positive influence on towards switching to green brands (Wu et al., 2018). On the other hand, survey on green detergent brands suggested that switching costs as well as consumer values have an important effect on brand relationship (Papista et al., 2018). A study with US and Romanian college students demonstrated that respondents will be more loyal to the brand if the individual has higher environmental concerns (Kuchinka et al., 2018). Another study with Pakistan university students showed that environmental attitudes are also positively associated with the perception of the green brand (Butt et al., 2017). As another example, Spanish consumer's social values affect buying intention of Fair Trade products more strongly than consumer's attitudes toward the Fair Trade brand (Pérez & García de los Salmenes, 2018). Therefore, it seems that the brand's image is observed through sustainability values of the consumer. A study with Austrian consumers by Schmuck et al. (2018) showed that functional ad that promotes environmental product attributes helps to increase purchase intention partially through brand attitudes, however, functional ads combined with nature images increases purchase intention through perception of environmental brand benefits. Further, highly involved consumers were more induced by nature images that might be correlated with feelings towards nature.

Brand perception is also related to other attributes. Origin of the brand, for example, may give different perception of the brand to the consumers. Interviews with Turkish consumers suggested that consumers see foreign brands as more reliable than local as they feel that foreign brands have stricter regulations by third party authorities (Kahraman & Kazançoğlu, 2019). Similarly, German consumers feel that personal care products that are eco-labelled and manufactured in EU are free of harmful substances (S. Hartmann & Klaschka, 2017). Naturalness, however, is another important aspect when discussing the selection of raw materials in relation to sustainability. A study by Frizzo et al. (2020) implies that perceived naturalness induces perception of brand authenticity. Brand perception may even have an effect on interpretation of labels. Since brand loyalty and environmental concern can affect the interpretation of third-party green ratings, the brand perception may affect consumers more than ratings (Kwon et al., 2016).

On the example of green detergent brands, consumers value green brand through economic, hedonic, and altruistic values (Papista et al., 2018). However, Liobikienė and Bernatoniene (2017) discuss in their literature review that the purchase of green personal care products is mainly influenced by health consciousness. Green colour/styling products are seen as luxury products and the purchasing behaviour is influenced more by brand and quality variables. Interviews with Malaysian consumers also suggest that branded cosmetic products are perceived as having a high quality compared to local products by nonbranded companies (Ayob et al., 2016). On the other hand, the health aspect may be dependent on the age group. A conjoint study with South Korean consumers by Jo and Shin (2017) showed that "Brand Experience", "Biodegradability", and "Skin Irritation Potential" were the most important attributes for choosing laundry detergents across all consumer groups, but the older people appeared to be more sensitive to health concerns ("Skin Irritation Potential"). In conclusion, the importance of brand depends on the perception of personal care/home use products and also the consumer group.

RQ5: How have consumers been educated towards sustainable consumption? What are the best strategies for communication? What are the best gaps for strategies?

How have consumers been educated towards sustainable consumption?

As consumers do not have a mutual understanding of sustainability, there is also a lack of knowledge on how to behave sustainably (Mancini et al., 2017). Public education may play a role in increasing consumer knowledge about sustainability (Gao et al., 2020). Findings from Sánchez-Bravo et al. (2021) show that young consumers with high education had more basic knowledge about sustainability. This supports the fact that education is crucial for promoting sustainability (Sánchez-Bravo et al., 2021; Uddin & Khan, 2018). The majority of current education systems are based on measurable examinations, and Hofman (2015) argues that memorizing information in this way does not encourage other important skills needed for a sustainable society. Independent thinking, having discussions, feeling empathy are some of the skills that need to be developed in young people, but often seems to be overlooked. As an example, Walshe (2013) used dialogic diaries with 14- and 15-year-old students to reflect and debate about environmental sustainability, which seemed to develop students' sustainable thinking. Hofman (2015) suggests that basic education needs to teach students to make informed choices based on inner reflection with questions: "what, how, why, and where". Kuchinka et al. (2018) further asserts that an academic curriculum focused on sustainability concerns should be provided in universities.

Public education alone is not enough to increase sustainable consumption. Reaching for a more sustainable society is also the responsibility of companies, marketers, governments, policymakers, academic research (Hojnik et al., 2019; Luchs et al., 2015; Mancini et al., 2017; Mandliya et al., 2020; Pekkanen et al., 2018; Sheth & Parvatiyar, 2021; J. Wang et al., 2020). As Kuchinka et al. (2018) put it, "countries need to develop national strategies..., companies need to adopt responsible decisions..., and consumers need to contribute... by adopting positive attitudes and behaviours towards sustainable issues". There are many different communication tools to influence consumers knowledge and awareness of sustainability, such as the media (Hojnik et al., 2019; Husain & Varshney, 2019; Y. Joshi & Rahman, 2019; Khan et al., 2020), internet (Y. Joshi & Rahman, 2019; Luo et al., 2020; H. Wang et al., 2019), support campaigns (Husain & Varshney, 2019; Malik & Singhal, 2017), product packaging (Husain & Varshney, 2019), interactive displays in stores (van Giesen & Leenheer, 2018), and educational campaigns such as talks and courses (Onel, 2017). All in all, marketing tools should not only create general awareness, but at the same time, build environmental concern values among individuals as well (Butt et al., 2017; Heo & Muralidharan, 2019).

What are the best strategies for communication?

Consumers concern towards sustainability are not always reflected in their purchase behaviour (Sheth & Parvatiyar, 2021). To improve communication of sustainable products, there should be a common understanding of the concept of sustainability. Further, attitude-behaviour gap can be reduced if the environmental attitudes are accurately determined (Shatnawi & Chin, 2019). The meaning of sustainable development should be clarified from the human needs viewpoint based on original definition by World Commission on Environment and Development (1987) (Balyejjusa, 2019). Meaning that sustainable behaviour should be encouraged by moving from the consumption/production focus that is based on materialistic desires and personal preferences towards meeting human needs (Balyejjusa, 2019; Mandliya et al., 2020). Tandon et al. (2020) discuss that consumers' purchase behaviour can be induced by intrinsic benefits, such as personal and health-oriented benefits. Santamaria et al. (2016) also suggest that sustainable products should be framed around well-being aspect rather than environmental dimension, since it may give a higher change of being understood and adopted. For example, health consciousness had the strongest effect on purchase intention in organic food purchase behaviour (Katt & Meixner, 2020). However, Jacobs et al. (2018) argues that for specific products, such as seafood, health message should not overlook the importance of the

environment. Combining both messages triggers positive attitude. Marketers should promote consumption of sustainable products by converting the messaging from general quality of life towards environmental quality of life (Sheth & Parvatiyar, 2021). Based on an example of Chipotle's Food for Thought (see also Photo 1); if a fast food restaurant communicates the brand through values and ethical claims, it can spark positive health associations for the products as well (Swenson & Olsen, 2018).



The image shows a screenshot of a Huffington Post article. At the top, there is a dark blue header with the 'HUFFPOST' logo in white and green, a hamburger menu icon on the left, and a user profile icon on the right. Below the header, the article title 'A Place at the Table: Introducing HuffPost Food For Thought' is displayed in a large, bold, dark blue font. The main text of the article is in a smaller, italicized font, starting with 'I'm delighted to announce Food For Thought, a new HuffPost section in partnership with Chipotle. As part of our site-wide focus on well-being and sustainability, Food For Thought will be examining our attitudes toward food, asking where our food comes from and how it's produced, because there are plenty of forces and special interests at work that would rather you not ask too many questions -- at great cost to our environment, our health, and the planet. We believe that it's important to consider not only the food in front of us -- on our plates, in our kitchens, in restaurants we patronize -- but to look closely at the many stages of food production and preparation that are often invisible to us.' Below the text, the author's name 'By Arianna Huffington, Contributor' is shown, followed by her credentials: 'Founder, The Huffington Post; Founder and CEO, Thrive Global'. A timestamp '10/21/2013 12:03pm EDT | Updated December 21, 2013' is also present. At the bottom of the article content, there is a disclaimer: 'This post was published on the now-closed HuffPost Contributor platform. Contributors control their own work and posted freely to our site. If you need to flag this entry as abusive, send us an email.' Finally, there is a row of six circular social media sharing icons: a bookmark, Facebook, Twitter, Pinterest, LinkedIn, and an email icon.

Photo 1. Announcement of Food for Thought, a new Huffington Post section in partnership with Chipotle. Source: https://www.huffpost.com/entry/food-for-thought_b_4127786 (25.08.21)

White et al. (2019) propose that there are five psychological factors for engaging environmental behaviour: social influence, habit formation, individual self, feelings and cognition, and tangibility. Marketing's focus should be changed from exploitative market-driven practices towards a responsible market-driver practices (Sheth & Parvatiyar, 2021). Narratives about consumption as drivers for consumption pose a challenge for marketing sustainability (Heath & Heath, 2016). Advertisement of sustainable products should take a more audience-centric approach (Mandliya et al., 2020). Feelings like guilt and fear can induce ethical decisions (Moore & Yang, 2020; Singh et al., 2018; Tandon et al., 2020) and emotional empowerment can promote sustainable consumption (Rezvani et al., 2017; Valor et al., 2018). Thus, marketers may use a sense of regret among less sustainable consumers, and feelings of personal achievement or sense of duty among sustainable individuals (Tandon et al., 2020). For instance, ethical information may have a halo effect to other sustainability dimensions and drive consumers towards environmentally sustainable behaviour (Armstrong et al., 2019). Focusing on internal drivers seems also to be more effective since internal commitment (responsibility, identity) can increase consumers' readiness to make sustainable decisions more than other external factors

(friends, families, obligations) (Arli et al., 2018). Meaning that effective communication of sustainable products should address sense of personal responsibility (Luchs et al., 2015; Onel, 2017) and capability (Ertz et al., 2016; Kim et al., 2016; Onel, 2017). From the cognitive aspect, P. Joshi and Kronrod (2020) also discuss based on experiments that brand names can make a difference in consumer perception. Silent sounds (such as using k/p/t) in brand names may be perceived as more friendly compared to voiced sounds that feel more aggressive. Low involvement products are purchased more on external cues rather than deep analytical comparisons, thus, using meaningless names (e.g. Zillow, Ramune) can help to express product attributes through sounds. Another effective way to communicate green marketing, is to trigger consumers by using their childhood memories (Beatson et al., 2020). Consumers can also act as the communication tool by sharing their experience and shaping the attitude of other consumers, so called positive word-of-mouth (Mandliya et al., 2020; Schiano et al., 2020; Tandon et al., 2020).

As environmental advertisement helps to introduce green products to consumers, then using labels is a way to help consumers to differentiate green brands from conventional (Vlad & Luca, 2020; Wongprawmas et al., 2016). Further, information on the package can help to increase consumer's knowledge and ability to behave sustainably (Adrita & Mohiuddin, 2020; D'Souza et al., 2021; Handayani, 2017; Hojnik et al., 2019; H. Wang et al., 2019). However, consumers have not embraced sustainability fully as their value system due to scepticism since there is still a lack of transparency about different sustainability credentials (Beatson et al., 2020; Eldesouky et al., 2020; Goh & Balaji, 2016; Husain & Varshney, 2019; Luo et al., 2020; Mancini et al., 2017; Pérez & García de los Salmenes, 2018; Witek, 2019). For example, findings from a survey with Brazil consumers demonstrated that most of them ignore sustainability labelling on food (A. R. de A. Silva et al., 2017). Another study with German consumers concluded that most consumers ignore existing labels on personal care products because the sustainable attributes are not obvious (Eberhart & Naderer, 2017). A study with Polish consumers showed that participants were not able to recognize different eco-labels, suggesting that these consumers do not consider labels in their purchasing decisions (Witek, 2019). Similarly, Spanish consumers did not know meanings of different Fair Trade labels (Eldesouky et al., 2020). Simpler cues need to be used for easier identification (Eberhart & Naderer, 2017; Lazzarini et al., 2017; Schiano et al., 2020). Good labelling exists only with regulations; thus, well-established certifications must be developed (D'Souza et al., 2021; Eberhart & Naderer, 2017; Seifi et al., 2012). However, consumers also need to be educated about labels to help them identify correct sustainable information from false claims (Luo et al., 2020) that can help to gain trust (Setyawan et al., 2018) and positive attitude towards sustainability (Taufique et al., 2016).

Firms also need to disclose information that supports the performance claims of their sustainable product in order to gain consumers' positive attitude and lessen the scepticism (Goh & Balaji, 2016; Husain & Varshney, 2019). Traditional and online communications can be used to build green trust towards company (Waites et al., 2020). Carvalho et al. (2016) further suggests that exchanging information through word-of-mouth and internet is more relevant than traditional marketing in terms of trust building. Digital marketing can play an important role to fill the gap between markets and companies, but more research is needed (Diez-Martin et al., 2019). Further, using sponsored media platforms can help to distance companies from controversial polarizing topics, and preserve the relationship with the consumers (Swenson & Olsen, 2018).

Pekkanen et al. (2018) propose that different age groups of people may have different values, e.g. younger people are less conservative and they are more likely to adjust themselves to sustainable values. Young consumers also have more trust towards green marketing since it can indicate the company's expertise, whereas older consumers may need other signals to build trust (Waites et al., 2020). Prakash et al. (2019) suggests that young Indian consumers tend to be influenced more by altruistic motives (environmental concern) than by egoistic motives (health concern) when choosing eco-friendly packaged products. Therefore, communicating environmental benefits of the products

should be more effective for motivating younger consumers. On the contrary, Roy et al. (2015) suggest that older people have had more time for self-reflection and may be motivated by the knowledge that reducing consumption inhibits the future ecological degradation. Perera and Hewege (2018) discuss that even though Australian young people know about climate change risks on eco-centric and anthropocentric level, they do not perceive them as high risks. Thus, focus should be turned on a societal level, e.g. teaching about effects of climate change to personal lives (Perera & Hewege, 2018). Young consumers should be targeted through social and interpersonal paths (Perera & Hewege, 2018; Uddin & Khan, 2018). Young consumers' environmental concern can be increased through education and proper marketing strategies (Setyawan et al., 2018). For instance, public policies can increase the sensitivity of younger consumers to environmental and social sustainability (Ghvanidze et al., 2016). However, Diprose et al. (2019) argue that sustainability is a collective movement and segmenting consumers based on generations should be avoided. Cross-generational communication of sustainability should include environmental, economic as well as wellbeing benefits.

Another option is to target consumer based on education level, starting with lower education level consumers (Sánchez-Bravo et al., 2020). This is mainly based on the principle that educational attainment is closely related to environmental concerns, which influences sustainable behaviour (*Ibid.*). Ghvanidze et al. (2016) discuss that different sustainability concerns can even bring different perception of consumer effectiveness depending on whether they believe that their behaviour can solve specific sustainability issues. If ethical production of food is less critical for less-educated and younger respondents, then environmental and social information on food products tend to be more influential for them. Another study on organic labels carried out by Rodrigues et al. (2016) with Brazilian consumers showed that there are three types of different segments. High income low education level consumers do not turn attention to organic labels at all ("Don't carers"), consumers with higher income and education tend to think about the psychological aspect like GMO ("GMO Freers"), and older consumers generally tended to associate organic labels with ecological aspects ("greeners").

Pekkanen et al. (2018) propose that consumers from different geographic areas of a country may even need a different approach, e.g. consumers who live in metropolitan areas are less conservative and more susceptible for sustainability information. Also, green brand equity may differ in metro and non-metro cities (Khandelwal et al., 2019). Consumption is a part of individual identity embedded in the culture; therefore, individual's cultural profile plays an important role (Nair & Little, 2016). Understanding of sustainability varies in different countries and in different consumer demographics (Pekkanen et al., 2018; Sánchez-Bravo et al., 2020). Sustainable products should be communicated through contextual meanings and cultural associations, which helps these products to be made more relevant for the consumers (Santamaria et al., 2016). For example, when Western cultures realize the importance of limiting resources for sustainability, then in non-Western countries the trend leans more towards hyper-consumption (Nair & Little, 2016). Hofman (2015) suggests that this may be due to the tendency that people who become used to certain level of income and specific consumption habits are often being compared with others in their environment. Therefore, new strategies should turn people's attention from the economic and social aspect towards sustainability and cohesion.

In Asian culture, society has an important role when engaging sustainable behaviour. For example, focusing on communal well-being can encourage sustainable behaviour. In Malaysia, commitment to residential area is a driver to become environmentally proactive if focused on the prevention of environmental degradation of the area (C. K. C. Lee et al., 2016). In India, gaining social status through building self-esteem can appeal to consumers' need for social approval and communal well-being (Tandon et al., 2020). Chinese researchers have suggested that social media can also be used help to improve consumer's knowledge about environmental problems (H. Wang et al., 2019) by demonstrating how these products act as a shared connection between friends (Luo et al., 2020). However, this does not mean that community is not important in Western countries. Sustainable

behaviour there can also be reinforced by building social support structures, such as ethical communities (Valor et al., 2018). Further, Lin (2020) suggest that new media technology should be used to construct transnational networks and establish new opportunities among international activists (Lin, 2020).

Cultural traditions may also have a strong influence on sustainability. Chinese consumers tend to be more conservative compared to some Western countries, and a higher value for traditions (Pekkanen et al., 2018). As personal values play an important role for Chinese consumers in forming environmental attitudes (H. Wang et al., 2019), they seem to be less prone to look for sustainability information (Pekkanen et al., 2018). For Chinese consumers it is important to communicate the benefits of using sustainable products (Luo et al., 2020). However, it is important to communicate sustainable food consumption not only by environmental and health benefits, but also by emphasizing on the improved food quality of production system (Gao et al., 2020). A study with Taiwan locals also suggested that sustainability movement should include local beliefs and traditional values (Lin, 2020). An Indian study by Joshi and Rahman (2019) discusses that sustainability is not solely an advertisable concept of products, but a spiritual way of life. Campaigns should promote activities that connect spirituality with sustainable purchasing.

What are the best gaps for strategies?

Even though availability of sustainable products is important, it does not affect the attitudes of these products, therefore, consumers should be also attracted by using strategies that increase visibility/accessibility (Carvalho et al., 2016; Cerri et al., 2018). Effective marketing strategy should include factors like: Network (social influence), Emotional appeal (environmental concern), Branding (strong image), and Environmental efficacy (perceived effectiveness) (Vlad & Luca, 2020). Retailers should also support the efforts of marketers and producers to induce sustainable behaviour among consumers. Pérez and García de los Salmenes (2018) discuss that in terms of Fair Trade products, there is poor availability of products in stores. Meaning that it should be improved as consumer's are not able to engage with these products. Lehner (2015) also mentions that stores may have conflicting messages. For example, if sustainable products are excluded from the sale campaigns, consumers may feel disappointed that "they pay for other consumers' selfish behaviour". However, price campaigns for sustainable products can enhance the positive experience for sustainable consumers.

Attempting to change consumption patterns through marketing is one way to nudge consumers towards sustainable behaviour. Reich and Soule (2016) demonstrate in their study that the effect of green demarketing (so-called "buy less" strategy) can affect US consumers more positively than with traditional green marketing. However, it depends on the advertisement type as this tendency was shown only in context of product advertisement. If there is no specific product (institutional advertisements), then green demarketing and traditional green marketing have less variance. Another way to move towards sustainable future is by implemented market construction paradigm. Holt (2012) discusses that many "unsustainable consumption patterns accumulate as unintended consequences of market construction processes". Meaning that when unsustainable consumption is already part of the market structure, the resulting paths adapt to this direction and, therefore, unsustainable actions become "sticky". Holt (2012) brings an example of bottled water market in United States. Before 1980s, bottled water was a luxurious status symbol and not available as widely. Since the late 1980s, Americans' distrust of public institutions began to grow because of disclosed health scares in public water supplies. Bottled water started to gain popularity as an alternative to tap water. Even today, environmental anti-campaigns for bottled water are not taken seriously enough and refillable containers are not seen as convenient. The public has a "ideological lock-in", and to overcome this, market-facing social movements are required. Every market should be aimed with specific ideologies and strategies to take advantage of vulnerable "lock-in" features.

Papista et al. (2018) suggests that in order to attract new consumers, barriers for purchasing sustainable products should be reduced. For example, reducing the switching costs for purchasing green brands by providing guarantees and refundable return policies. C. Hartmann and Siegrist (2017) discuss that environmental knowledge does not always lead to reduced consumption, instead knowledge about consequences of the environmental behaviour should be improved. For example, that meat consumers are also paying for external costs related to meat production. Ertz et al. (2016) suggests that taxing unsustainable actions may also financially attractive for private sector.

IAT study by Mai et al. (2019) suggests that consumers may associate sustainability with lower product quality. Downplaying products greenness and promoting more “traditional” aspects, may increase consumers’ interest (Usrey et al., 2020). Thus, using different cues and signals to communicate product strength (such as quality certificates, different colours, packaging materials) should be used (Mai et al., 2019). However, marketing strategies (e.g. whether use rational or emotional signals) depends on the environment and the target consumer (Aagerup et al., 2019). For instance, consumers’ regulatory focus orientation affects the effectiveness of communication. Codini et al. (2018) demonstrate that “prevention-type” consumers, who are focused on responsibilities, are less prone to accept changes, whereas “promotion-type” consumers may accept habitual changes openly if they see the benefits in it. Therefore, “prevention-type” need additional support for making decisions and focusing on product-related green attributes in advertisement is more important than emphasizing non-green product attributes.

In conclusion, best gaps for strategies are increasing visibility of the products and reducing barriers for sustainable consumption. Visibility of sustainable products may be increased by using different marketing strategies, as well as improving availability in stores (incl. price campaigns). Barriers may be reduced by reducing switching costs (providing guarantees, refunds) on one hand, but taxing unsustainable actions on the other hand. Also, products should be promoted by focusing on “traditional” aspects and signalling product strengths to prevent negative preconceptions about the sustainable products.

RQ6: How can companies become more sustainable from a consumer-relevance standpoint?

As Brown (2013) discusses, micro-marketing has long been the focus of sustainable marketing. Sustainability issues relate to more complex societal problems and, therefore, attention should be turned towards macro-marketing. Organizational development needs a managerial approach that demonstrates the significance of building positive relationships and narratives together with promoting sustainable development and well-being in the organization (Di Fabio, 2017). Yngfalk (2019) discusses that sustainability is often framed as costly and ineffective, and that common issues such as food waste are inevitable. The current commercial orientation comes with a price of environmental responsibility. Therefore, regulations and policies should also be used to endorse sustainable organisational changes on industry level. To ensure the sustainable development of the company, management should provide guidelines for the implementation of the strategy as well as employees should work together to achieve sustainability goals (Yang et al., 2017). Brand managers should ensure that the sustainability goals meet the overall business strategy as well (Lahtinen & Närvänen, 2020). A study by Muñoz and Cohen (2018) where interviews were conducted with sustainable entrepreneurs from different Western countries suggested that entrepreneurs see themselves as the instrument that lead the change. It is like a quest or a mission to use their business and market as a force to make the essential changes towards a sustainable society.

Companies should not only rely on marketing orientation, but should proactively improve their own innovation and brand orientation (Tollin & Christensen, 2019). Sustainability encourages developing

eco-innovation as it can gain positive feedback from consumers better than resource substitutions (Paparoidamis & Tran, 2019). Carey et al. (2019) discuss that when designing sustainable products, focus should be on what consumers do rather than what they think. Suggesting that product design should also be user-centred, relying on environmental personas rather than image boards to overcome their attitudes. Eco-innovation should focus on the “right” consumers to develop a successful product (Paparoidamis & Tran, 2019). Randelli and Rocchi (2017) also discuss that consumers and producers should interact in the innovation process. Involving consumers with suitable tools can strengthen the innovation process and enhance the ability to move towards sustainability. However, consumer participation can also hinder the process if they have low environmental knowledge or have too dominant individualistic behaviour. Responsible consumption is related to consumer motives, but also control mechanisms and technical cycle of products (Escobar-Sierra et al., 2021). Pandey (2020) suggests that the circular design model can promote sustainability through the reuse or regeneration of products. In circular design, products at the end of their life cycle can be reused, refurbished (recovering and reselling), remanufactured (using part of the product for other product), or recycled to be used in other ways. The circular design process implements four stages: 1) understand (why consumer needs the product), 2) define (create the business goal), 2) make (designing the product based on user-centred research), 3) release (product launch, getting feedback).

A study by J. Lee & Kwon (2019) conclude that encouraging a firm’s environmental greening and improving their reputation for social responsibility are the most important factors in firm performance. Authors demonstrate that for U.S. manufacturing firms, environmental greening and corporate reputation are more important in determining the firm’s market value performance than other characteristics, such as firm’s size, R&D, efficiency. Vredenburg et al. (2020) suggest three different ways to increase consumer choice by using marketing strategies that publicly take a stand on different social issues (i.e. brand activism). First, brand-level policy helps to set clear guidelines to perform activities in the company to avoid greenwashing. Meaning that brands should emphasize their actual efforts in the society/environment, not the unimportant benefits. Second, third-party certifications help consumers to gain knowledge and trust for brands.

Third, public-private partnerships bring different issues to public interest and deepen the brand messaging (Vredenburg et al., 2020). Longo et al. (2019) also suggest that collaboration between stakeholders is needed to increase brand’s credibility, reduce scepticism, and facilitate shared practices that can ease the feeling of participant’s personal guilt. Based on a study in UK, businesses and NGOs use words focusing on environmental sustainability differently (Mandliya et al., 2020). Specific organizations (e.g. Greenpeace) and social movements that educate consumers on sustainability may be perceived more trustworthy, thus, firms could collaborate with these organizations as well to discuss how link these sustainability concerns into their products (Ulusoy & Barretta, 2016). Further, community-based branding can help to transition towards sustainable practices by building a social structure that helps to gain environmental values (Hojnik et al., 2019). Sponsoring outdoor educational programmes can help to improve brand image by demonstrating how the brand’s products improve the environment, and also might encourage younger consumers to look for these specific products (Heo & Muralidharan, 2019).

Corporate social responsibility (CSR) is a set of managerial actions that engages company’s socially positive behaviour. CSR improves consumer’s trust and commitment to the brand (Gosselt et al., 2019; Muniz et al., 2019; Servera-Francés & Piqueras-Tomás, 2019; Upadhye et al., 2019) by having an indirect effect on product judgement and purchase intention (Chen & Huang, 2018). Further, implementing socially responsible strategy can improve firm’s innovativeness (by being perceived as less risky) (Chen & Huang, 2018; Upadhye et al., 2019) and competitive advantages (Chen & Huang, 2018; Mancini et al., 2017; Nosi et al., 2020; Sun & Price, 2016). Vice versa, corporate social irresponsibility affects perceived values (Escobar-Sierra et al., 2021). However, company’s CSR actions must be visible to consumer in order to gain a positive effect from CSR behaviour (Muniz et al., 2019;

Upadhye et al., 2019). Advertising and promotions should be used to turn consumer's attention to issues that the brand helps to resolve (Schamp et al., 2019) as well as increasing credibility of CSR communication (Byrum, 2019). For example, consumers do not integrate the attitude towards the Fair Trade brand with the purchasing process – not due to the lack of interest, but the lack of awareness of since there are many unknown Fair Trade brands on the market (Pérez & García de los Salmones, 2018; Schamp et al., 2019). Awareness that buying from CSR companies can contribute for a more sustainable society is also more evident regards to non-food products (Čerkasov et al., 2017). Gosselt et al. (2019) note that third-party CSR label tend to gain a more positive consumer response than with uncertified CSR labels. Another study by Čerkasov et al. (2017) with Czech consumers alternatively suggests that awareness of CSR actions is not always enough for influencing purchasing behaviour. Other attributes (such as product quality, the price, previous experience) may be more important. There are many other aspects that are important in CSR communication as well. Muniz et al. (2019) discuss that CSR messages should have a long term effect on brand equity, and not be perceived as opportunistic. Also, CSR communication depends on the country. CSR's effect on brand equity is weaker in cultures where consumers expect that governments promote the welfare and companies contribute because of mandatory regulations. CSR has a stronger effect in countries where responsibility behaviour is voluntary for the company.

Corporate environmental responsibility (CER) is a set of managerial actions that refrains a given company from damaging the environment. Similar to CSR, improving the awareness of the company's environmental impact can help to gain positive effect for the company since it can increase perceived organizational effectiveness (Husain & Varshney, 2019), generate green trust and competitive advantages (Kuchinka et al., 2018). A study with Chinese companies showed that CER helps to accomplish brand sustainability, thus, gaining a positive image and gaining consumer's recognition (Long & Lin, 2018). Ulusoy and Barretta (2016), however, argue that brand trust alone does not affect the intention to purchase pro-environmental products based on their study with US university students. Green trust and green brand affect the purchasing intentions through a positive relationship with perceived quality of green products (Nekmahmud & Fekete-Farkas, 2020). Consumers need to believe that using green brand products can satisfy their expectations (Wu et al., 2018). Interestingly, perceived price can also affect the green trust and purchase intention if consumers believe that high price represents high quality (H. Wang et al., 2019). In addition, stakeholders and customers need time to recognize company's CER actions to reach the positive impact on image (Long & Lin, 2018).

Customer loyalty is related to consumer perception of corporate sustainability, as shown by Moiescu (2018) with dairy and personal care products as well as telecommunication and banking services. However, the importance of different sustainability aspects may be different. If loyalty concept for dairy products is related to communication of environmental sustainability and local development, then for personal care products, perceived economic sustainability is more important. In order to increase perceived consumer effectiveness of products, companies should indicate the actual impact of the product on the environment that also legitimizes their initiatives (Gleim et al., 2019; Waites et al., 2020). Sustainable corporate branding can be improved by having dialogues with the consumers to understand their values (Lahtinen & Närvänen, 2020). Gleim et al. (2019) bring out that individual environment has an important impact on sustainable behaviour, thus, firms should attract individuals by sparking interest and making sustainability the norm.

Consumers face various external factors every day, which makes it confusing to understand whom to trust (i.e. organizations/companies, media, government) (Gleim et al., 2019). It is important to build the trust with the consumers with communication strategies. Company's green message credibility has a positive effect on attitude towards the brand (Butt et al., 2017; Husain & Varshney, 2019; H. Wang et al., 2019). A study with Indian consumers showed that green brand equity is related to other green characteristics expressed by brand image, satisfaction, trust, reference group, loyalty and advertisement (Khandelwal et al., 2019). Another study with Indian students suggested that

implementing a green strategy is more convincing than using conventional organizational strategies (Mandliya et al., 2020). On the contrary, Ulusoy and Barretta (2016) suggest that communicating environmental concern may even cause a negative perception of brand trust. This happens in cases where consumers feel that the company's actions are not sincere, but rather opportunistic and exploitative of the situation. Indeed, impression of silent green and vocal green organizations tend to be more positive than compared to greenwashing companies (De Jong et al., 2018). As mentioned in RQ5, green demarketing may be more impactful in some cases than emphasizing green attributes (Reich & Soule, 2016). Therefore, it is important to note how to communicate these messages as a company. Lack of effective green marketing can lead to failure on the market (Khandelwal et al., 2019).

On one hand, green attributes of the company and the products should be highlighted (Chin et al., 2018). On the other hand, claims should be clear and trustworthy (Wei et al., 2017), avoiding misleading or exaggerated claims (Kahraman & Kazançoğlu, 2019; Luo et al., 2020) to gain trust. Consumers should understand how using green brand products will help the environment (Wu et al., 2018). Also, instructions on the package on how to behave sustainably should be added (Adrita & Mohiuddin, 2020). Consumer surveys and consumer feedback should be taken account when designing advertisements (Luo et al., 2020). Companies should consider different motivations of people behind sustainable behaviour (Royne et al., 2016). Marketers must promote opportunities related to the initiation and administration of new development projects, as these can provide paths for the entire company and establish innovation as central dimension in marketing (Tollin & Christensen, 2019).

RQ7: How does greenwashing affect consumer behaviour?

As previously discussed in RQ6, there seems to be a fine line between successful sustainable communication and excessive information noise. One of the initial issues that may be contributing to green scepticism, is the fact that consumers do not have a uniform understanding of the term sustainability (see also RQ1), and marketers do not fully comprehend the consumer's expectations behind sustainability (Simpson & Radford, 2012). In the current market situation, consumers may perceive green advertisement as a trend that companies try to exploit to make a profit for the company (Kahraman & Kazançoğlu, 2019; Simpson & Radford, 2012; Ulusoy & Barretta, 2016), so called self-promoter paradox (Gosselt et al., 2019). Consumers may also have a third-person perception for green advertisements. For example, Mo et al. (2018) showed in their study with Chinese university students that green claims focusing on product benefits are perceived to be more effective for other consumers, not for themselves.

While greenwashing may increase the perception of environmental performance of the organization among the consumers, it does not act to increase purchase intention in the long term (De Jong et al., 2018). Lack of trustworthy information can further increase consumer scepticism (referenced in RQ5), but too broad information can be misleading and overwhelming to understand (Heo & Muralidharan, 2019; Simpson & Radford, 2012; Stancu et al., 2020). This should be avoided as scepticism can have a negative effect on green brand attitude due to the tendency that consumers respond to green advertisement less (Husain & Varshney, 2019), have less trust on brand credibility (Akturan, 2018; Mangini et al., 2020) and have less intentions to purchase the product (Akturan, 2018; Husain & Varshney, 2019; Kahraman & Kazançoğlu, 2019). To avoid the impression of greenwashing, Jog and Singhal (2019) suggest that consumer awareness about greenwashing should be increased, companies should highlight the environmental measures taken, and expose other products that use greenwashing strategies.

Sceptical consumers may have lower green purchase intentions due to lower knowledge and concern about environmental issues (Goh & Balaji, 2016; Heo & Muralidharan, 2019). Consumers that rely on their own environmental knowledge, tend to make their purchase decisions based on environmental concern; and consumers that rely on advertisement claims, and consumers relying on brand advertisement make their decisions based on environmental impact (Ulusoy & Barretta, 2016). Wei et al. (2017) also supports the findings that consumers with high environmental involvement use green advertisement information; and sceptical consumers are not convinced by green advertisement because of negative information utility and green trust. Sceptical consumers may lower the informative utility of claims and are not interested to chase for supplementary information about the green products (Goh & Balaji, 2016). Paper by Luo et al. (2020) also claims that green scepticism does not affect consumer purchase intention directly, but instead these aspects are intervened by the information utility. Interestingly, another study with Indian students showed that enduring involvement (permanent involvement like environmental concern) is not as important to message involvement as situational involvement (described as temporary involvement) (Fernando et al., 2016).

Scepticism does not always decrease purchase intention. If consumers find green advertisement to be useful by creating awareness, it motivates to purchase green products as well (Govender & Govender, 2017; Luo et al., 2020). Studies suggest that green scepticism can have a positive influence if it increases critical analysis of the advertisement (M. E. Silva et al., 2020). Positive attitude from sceptical consumers can also be aroused through advertisement elements like humour or music (Yu, 2020). Changes in behaviour may also relate to the “readiness to be green” (Arli et al., 2018). Gosselt et al. (2019) propose that inconsistent information may be perceived as sincere if consumer feels that “the company does its best in providing ecologically sound products” but they are still in the beginning stage. Therefore, further research is needed to understand the situations when providing information about sustainability is perceived as educational, effective; and when does it cause more confusion, scepticism (Stancu et al., 2020).

CONCLUSIONS

Consumers have difficulties in understanding sustainability. Although the perception may differ by demographics, it is most often associated with the environmental aspect. Further, the purchasing decisions are related to environmental attitudes. As sustainability impacts behaviour through positive and negative thought patterns, it is important to understand the thought process of consumers in their inner monologues.

Not only the personal differences are important for the perception of sustainability, but also different product attributes. Sustainable products are often perceived as products with natural ingredients, organically produced, free from chemicals. Packaging cues have an important effect on the impression of product's sustainability as well as product's life cycle. It is also important to note that consumer preferences regarding packaging may depend on the personal motive. From visual cues, labels are also often used to communicate sustainability to consumers. The variety of different labels makes it difficult for consumers to understand the sustainability message. However, labels are not even enough for those who are influenced more by other product attributes.

Finding a right balance in communication is another important aspect in sustainability marketing. Green attributes should be highlighted to attract the consumers and to help them gain confidence when purchasing sustainable products. On the other hand, however, communication should be clear and transparent to avoid green scepticism. Communications tools should also be used to educate consumers on sustainability – from public education and talks to various marketing tools such as advertisements. Current marketing tools should also be improved, for example labelling system with specific certifications and regulations. With better communication it is possible to improve the common understanding of sustainability, and thus, encourage sustainable behaviour.

LIST OF REFERENCES

- Aagerup, U., Frank, A.-S., & Hultqvist, E. (2019). The persuasive effects of emotional green packaging claims. *British Food Journal*, 121(12), 3233–3246. <https://doi.org/10.1108/BFJ-08-2019-0652>
- Adrita, U. W., & Mohiuddin, M. F. (2020). Impact of opportunity and ability to translate environmental attitude into ecologically conscious consumer behavior. *Journal of Marketing Theory and Practice*, 28(2), 173–186. <https://doi.org/10.1080/10696679.2020.1716629>
- Aguiar, L. K., Martinez, D. C., & Caleman, S. M. Q. (2018). Consumer Awareness of Palm Oil as an Ingredient in Food and Non-Food Products. *Journal of Food Products Marketing*, 24(3), 297–310. <https://doi.org/10.1080/10454446.2017.1266559>
- Akturan, U. (2018). How does greenwashing affect green branding equity and purchase intention? An empirical research. *Marketing Intelligence & Planning*, 36(7), 809–824. <https://doi.org/10.1108/MIP-12-2017-0339>
- Amberg, N., & Magda, R. (2018). Environmental Pollution and Sustainability or the Impact of the Environmentally Conscious Measures of International Cosmetic Companies on Purchasing Organic Cosmetics. *Visegrad Journal on Bioeconomy and Sustainable Development*, 7, 23–30. <https://doi.org/10.2478/vjbsd-2018-0005>
- Arli, D., Tan, L. P., Tjiptono, F., & Yang, L. (2018). Exploring consumers' purchase intention towards green products in an emerging market: The role of consumers' perceived readiness. *International Journal of Consumer Studies*, 42(4), 389–401. <https://doi.org/10.1111/ijcs.12432>
- Armstrong, B., Meskin, A., & Blundell-Birtill, P. (2019). Delicious but Immoral? Ethical Information Influences Consumer Expectations and Experience of Food. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.00843>
- Ayob, A., Awadh, A. I., Jafri, J., Jamshed, S., Ahmad, H. M. A., & Hadi, H. (2016). The enlightenment from Malaysian consumers' perspective toward cosmetic products. *Journal of Pharmacy And Bioallied Sciences*, 8(3), 229. <https://doi.org/10.4103/0975-7406.174232>
- Balyejjusa, S. M. (2019). Sustainable Development Practice: The Central Role of the Human Needs Language. *Social Change*, 49(2), 293–309. <https://doi.org/10.1177/0049085719844104>
- Beatson, A., Gottlieb, U., & Pleming, K. (2020). Green consumption practices for sustainability: An exploration through social practice theory. *Journal of Social Marketing*, 10(2), 197–213. <https://doi.org/10.1108/JSOCM-07-2019-0102>
- Bosona, T., & Gebresenbet, G. (2018). Swedish Consumers' Perception of Food Quality and Sustainability in Relation to Organic Food Production. *Foods*, 7(4), 54. <https://doi.org/10.3390/foods7040054>
- Briand Décré, G., & Cloonan, C. (2019). A touch of gloss: Haptic perception of packaging and consumers' reactions. *Journal of Product & Brand Management*, 28(1), 117–132. <https://doi.org/10.1108/JPBM-05-2017-1472>
- Brown, M. (2013). A Methodology for Mapping Meanings in Text-Based Sustainability Communication. *Sustainability*, 5(6), Article 6. <https://doi.org/10.3390/su5062457>
- Burnier, P. C., Spers, E. E., & Guerra, D. (2020). Effect of Production Process and Attitudes on the Intent to Buy Sustainable Beef. *Journal of International Food & Agribusiness Marketing*, 32(2), 168–197. <https://doi.org/10.1080/08974438.2019.1599755>
- Butt, M. M., Mushtaq, S., Afzal, A., Khong, K. W., Ong, F. S., & Ng, P. F. (2017). Integrating Behavioural and Branding Perspectives to Maximize Green Brand Equity: A Holistic Approach. *Business Strategy and the Environment*, 26(4), 507–520. <https://doi.org/10.1002/bse.1933>
- Byrum, K. (2019). "Hey Friend, Buy Green": Social Media Use to Influence Eco-Purchasing Involvement. *Environmental Communication*, 13(2), 209–221. <https://doi.org/10.1080/17524032.2017.1308404>

- Calderon-Monge, E., Pastor-Sanz, I., & Sendra Garcia, F. J. (2020). Analysis of sustainable consumer behavior as a business opportunity. *Journal of Business Research*, 120, 74–81. <https://doi.org/10.1016/j.jbusres.2020.07.039>
- Caradonna, J. L. (2014). *Sustainability: A History*. Oxford University Press.
- Carey, M., White, E. J., McMahon, M., & O’Sullivan, L. W. (2019). Using personas to exploit environmental attitudes and behaviour in sustainable product design. *Applied Ergonomics*, 78, 97–109. <https://doi.org/10.1016/j.apergo.2019.02.005>
- Carvalho, B. L. de, Salgueiro, M. de F., & Rita, P. (2016). Accessibility and trust: The two dimensions of consumers’ perception on sustainable purchase intention. *International Journal of Sustainable Development & World Ecology*, 23(2), 203–209. <https://doi.org/10.1080/13504509.2015.1110210>
- Čerkasov, J., Huml, J., Vokáčová, L., & Margarisová, K. (2017). Consumer’s Attitudes to Corporate Social Responsibility and Green Marketing. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 65(6), 1865–1872. <https://doi.org/10.11118/actaun201765061865>
- Cerri, J., Testa, F., & Rizzi, F. (2018). The more I care, the less I will listen to you: How information, environmental concern and ethical production influence consumers’ attitudes and the purchasing of sustainable products. *Journal of Cleaner Production*, 175, 343–353. <https://doi.org/10.1016/j.jclepro.2017.12.054>
- Chen, X., & Huang, R. (2018). The impact of diverse corporate social responsibility practices on consumer product evaluations. *Journal of Product & Brand Management*, 27(6), 701–715. <https://doi.org/10.1108/JPBM-01-2017-1390>
- Chin, J., Jiang, B. C., Mufidah, I., Persada, S. F., & Noer, B. A. (2018). The Investigation of Consumers’ Behavior Intention in Using Green Skincare Products: A Pro-Environmental Behavior Model Approach. *Sustainability*, 10(11), Article 11. <https://doi.org/10.3390/su10113922>
- Cho, Y.-N., & Taylor, C. R. (2020). The role of ambiguity and skepticism in the effectiveness of sustainability labeling. *Journal of Business Research*, 120, 379–388. <https://doi.org/10.1016/j.jbusres.2019.08.034>
- Codini, A. P., Miniero, G., & Bonera, M. (2018). Why not promote promotion for green consumption? The controversial role of regulatory focus. *European Business Review*, 30(5), 554–570. <https://doi.org/10.1108/EBR-09-2016-0118>
- De Jong, M. D. T., Harkink, K. M., & Barth, S. (2018). Making Green Stuff? Effects of Corporate Greenwashing on Consumers. *Journal of Business and Technical Communication*, 32(1), 77–112. <https://doi.org/10.1177/1050651917729863>
- Di Fabio, A. (2017). The Psychology of Sustainability and Sustainable Development for Well-Being in Organizations. *Frontiers in Psychology*, 8. <https://doi.org/10.3389/fpsyg.2017.01534>
- Diez-Martin, F., Blanco-Gonzalez, A., & Prado-Roman, C. (2019). Research Challenges in Digital Marketing. *Sustainability*, 11(10), Article 10. <https://doi.org/10.3390/su11102839>
- Dilkes-Hoffman, L., Ashworth, P., Laycock, B., Pratt, S., & Lant, P. (2019). Public attitudes towards bioplastics – knowledge, perception and end-of-life management. *Resources, Conservation and Recycling*, 151, 104479. <https://doi.org/10.1016/j.resconrec.2019.104479>
- Diprose, K., Valentine, G., Vanderbeck, R. M., Liu, C., & McQuaid, K. (2019). Building common cause towards sustainable consumption: A cross-generational perspective. *Environment and Planning E: Nature and Space*, 2(2), 203–228. <https://doi.org/10.1177/2514848619834845>
- D’Souza, C., Taghian, M., & Brouwer, A. R. (2021). Ecolabels information and consumer self-confidence in decision making: A strategic imperative. *Journal of Strategic Marketing*, 29(2), 141–157. <https://doi.org/10.1080/0965254X.2019.1636845>
- Eberhart, A. K., & Naderer, G. (2017). Quantitative and qualitative insights into consumers’ sustainable purchasing behaviour: A segmentation approach based on motives and heuristic cues. *Journal of Marketing Management*, 33(13–14), 1149–1169. <https://doi.org/10.1080/0267257X.2017.1371204>

- Eldesouky, A., Mesias, F. J., & Escribano, M. (2020). Perception of Spanish consumers towards environmentally friendly labelling in food. *International Journal of Consumer Studies*, 44(1), 64–76. <https://doi.org/10.1111/ijcs.12546>
- Emekci, S. (2019). Green consumption behaviours of consumers within the scope of TPB. *Journal of Consumer Marketing*, 36(3), 410–417. <https://doi.org/10.1108/JCM-05-2018-2694>
- Ertz, M., Karakas, F., & Sarigöllü, E. (2016). Exploring pro-environmental behaviors of consumers: An analysis of contextual factors, attitude, and behaviors. *Journal of Business Research*, 69(10), 3971–3980. <https://doi.org/10.1016/j.jbusres.2016.06.010>
- Escobar-Sierra, M., García-Cardona, A., & Acevedo, L. D. V. (2021). How moral outrage affects consumer's perceived values of socially irresponsible companies. *Cogent Business & Management*, 8(1), 1888668. <https://doi.org/10.1080/23311975.2021.1888668>
- Farmer, A., Breazeale, M., Stevens, J. L., & Waites, S. F. (2017). Eat Green, Get Lean: Promoting Sustainability Reduces Consumption. *Journal of Public Policy & Marketing*, 36(2), 299–312. <https://doi.org/10.1509/jppm.16.087>
- Fernando, A., Sivakumaran, B., & Suganthi, L. (2016). Message involvement and attitude towards green advertisements. *Marketing Intelligence & Planning*, 34. <https://doi.org/10.1108/MIP-11-2015-0216>
- Frizzo, F., Dias, H. B. A., Duarte, N. P., Rodrigues, D. G., & Prado, P. H. M. (2020). The Genuine Handmade: How the Production Method Influences Consumers' Behavioral Intentions through Naturalness and Authenticity. *Journal of Food Products Marketing*, 26(4), 279–296. <https://doi.org/10.1080/10454446.2020.1765936>
- Gao, Z., Li, C., Bai, J., & Fu, J. (2020). Chinese consumer quality perception and preference of sustainable milk. *China Economic Review*, 59, 100939. <https://doi.org/10.1016/j.chieco.2016.05.004>
- Ghose, A., & Chandra, B. (2020). Models for Predicting Sustainable Durable Products Consumption Behaviour: A Review Article. *Vision*, 24(1), 81–89. <https://doi.org/10.1177/0972262919860962>
- Ghvanidze, S., Velikova, N., Dodd, T. H., & Oldewage-Theron, W. (2016). Consumers' environmental and ethical consciousness and the use of the related food products information: The role of perceived consumer effectiveness. *Appetite*, 107, 311–322. <https://doi.org/10.1016/j.appet.2016.08.097>
- Gleim, M. R., Smith, J. S., & Jr, J. J. C. (2019). Extending the institutional environment: The impact of internal and external factors on the green behaviors of an individual. *Journal of Strategic Marketing*, 27(6), 505–520. <https://doi.org/10.1080/0965254X.2018.1454498>
- Goh, S. K., & Balaji, M. S. (2016). Linking green skepticism to green purchase behavior. *Journal of Cleaner Production*, 131, 629–638. <https://doi.org/10.1016/j.jclepro.2016.04.122>
- Gosselt, J. F., van Rompay, T., & Haske, L. (2019). Won't Get Fooled Again: The Effects of Internal and External CSR ECO-Labeling. *Journal of Business Ethics*, 155(2), 413–424. <https://doi.org/10.1007/s10551-017-3512-8>
- Govender, J. P., & Govender, T. L. (2017). The influence of green marketing on consumer purchase behavior. *Environmental Economics*, 7(2), 77–85. [https://doi.org/10.21511/ee.07\(2\).2016.8](https://doi.org/10.21511/ee.07(2).2016.8)
- Groening, C., Sarkis, J., & Zhu, Q. (2018). Green marketing consumer-level theory review: A compendium of applied theories and further research directions. *Journal of Cleaner Production*, 172, 1848–1866. <https://doi.org/10.1016/j.jclepro.2017.12.002>
- Handayani, W. (2017). Green Consumerism: An Eco-Friendly Behaviour Form Through The Green Product Consumption and Green Marketing. *Sinergi : Jurnal Ilmiah Ilmu Manajemen*, 7(2). <https://doi.org/10.25139/sng.v7i2.364>
- Hartmann, C., & Siegrist, M. (2017). Consumer perception and behaviour regarding sustainable protein consumption: A systematic review. *Trends in Food Science & Technology*, 61, 11–25. <https://doi.org/10.1016/j.tifs.2016.12.006>

- Hartmann, S., & Klaschka, U. (2017). Interested consumers' awareness of harmful chemicals in everyday products. *Environmental Sciences Europe*, 29(1), 29. <https://doi.org/10.1186/s12302-017-0127-8>
- Heath, T., & Heath, M. (2016). Once upon a time there was a consumer...: Stories of magic and the magic of stories. *Journal of Marketing Management*, 32(9–10), 811–826. <https://doi.org/10.1080/0267257X.2016.1189450>
- Heo, J., & Muralidharan, S. (2019). What triggers young Millennials to purchase eco-friendly products?: The interrelationships among knowledge, perceived consumer effectiveness, and environmental concern. *Journal of Marketing Communications*, 25(4), 421–437. <https://doi.org/10.1080/13527266.2017.1303623>
- Herbes, C., Beuthner, C., & Ramme, I. (2018). Consumer attitudes towards biobased packaging – A cross-cultural comparative study. *Journal of Cleaner Production*, 194, 203–218. <https://doi.org/10.1016/j.jclepro.2018.05.106>
- Hinkes, C., & Christoph-Schulz, I. (2019). Consumer Attitudes toward Palm Oil: Insights from Focus Group Discussions. *Journal of Food Products Marketing*, 25(9), 875–895. <https://doi.org/10.1080/10454446.2019.1693468>
- Hofman, M. (2015). What is an Education for Sustainable Development Supposed to Achieve—A Question of What, How and Why. *Journal of Education for Sustainable Development*, 9(2), 213–228. <https://doi.org/10.1177/0973408215588255>
- Hojnik, J., Ruzzier, M., & Konečnik Ruzzier, M. (2019). Transition towards Sustainability: Adoption of Eco-Products among Consumers. *Sustainability*, 11(16), Article 16. <https://doi.org/10.3390/su11164308>
- Holt, D. B. (2012). Constructing Sustainable Consumption: From Ethical Values to the Cultural Transformation of Unsustainable Markets. *The ANNALS of the American Academy of Political and Social Science*, 644(1), 236–255. <https://doi.org/10.1177/0002716212453260>
- Husain, R. V. S., & Varshney, S. (2019). Is Current Way of Promoting Sustainability, Sustainable? *Journal of Nonprofit & Public Sector Marketing*, 31(1), 84–113. <https://doi.org/10.1080/10495142.2018.1526735>
- Hwang, K., & Kim, H. (2018). Are Ethical Consumers Happy? Effects of Ethical Consumers' Motivations Based on Empathy Versus Self-orientation on Their Happiness. *Journal of Business Ethics*, 151(2), 579–598. <https://doi.org/10.1007/s10551-016-3236-1>
- Jacobs, S., Sioen, I., Marques, A., & Verbeke, W. (2018). Consumer response to health and environmental sustainability information regarding seafood consumption. *Environmental Research*, 161, 492–504. <https://doi.org/10.1016/j.envres.2017.10.052>
- Jo, M., & Shin, J. (2017). Market strategy for promoting green consumption: Consumer preference and policy implications for laundry detergent. *International Journal of Consumer Studies*, 41(3), 283–290. <https://doi.org/10.1111/ijcs.12339>
- Jog, D., & Singhal, D. (2019). Pseudo green players and their greenwashing practices: A differentiating strategy for real green firms of personal care category. *Strategic Direction*, 35(12), 4–7. <https://doi.org/10.1108/SD-07-2019-0143>
- Joshi, P., & Kronrod, A. (2020). Sounds of Green: How Brand Name Sounds Metaphorically Convey Environmental Friendliness. *Journal of Advertising*, 49(1), 61–77. <https://doi.org/10.1080/00913367.2019.1696720>
- Joshi, Y., & Rahman, Z. (2019). Consumers' Sustainable Purchase Behaviour: Modeling the Impact of Psychological Factors. *Ecological Economics*, 159, 235–243. <https://doi.org/10.1016/j.ecolecon.2019.01.025>
- Kahraman, A., & Kazançoğlu, İ. (2019). Understanding consumers' purchase intentions toward natural-claimed products: A qualitative research in personal care products. *Business Strategy and the Environment*, 28(6), 1218–1233. <https://doi.org/10.1002/bse.2312>

- Katt, F., & Meixner, O. (2020). Is It All about the Price? An Analysis of the Purchase Intention for Organic Food in a Discount Setting by Means of Structural Equation Modeling. *Foods*, 9(4), Article 4. <https://doi.org/10.3390/foods9040458>
- Khan, M. S., Saengon, P., Alganad, A. M. N., Chongcharoen, D., & Farrukh, M. (2020). Consumer green behaviour: An approach towards environmental sustainability. *Sustainable Development*, 28(5), 1168–1180. <https://doi.org/10.1002/sd.2066>
- Khandelwal, U., Kulshreshtha, K., & Tripathi, V. (2019). Importance of Consumer-based Green Brand Equity: Empirical Evidence. *Paradigm*, 23(1), 83–97. <https://doi.org/10.1177/0971890719844428>
- Kim, Y., Yun, S., Lee, J., & Ko, E. (2016). How consumer knowledge shapes green consumption: An empirical study on voluntary carbon offsetting. *International Journal of Advertising*, 35(1), 23–41. <https://doi.org/10.1080/02650487.2015.1096102>
- Koerber, K. von, Bader, N., & Leitzmann, C. (2017). Wholesome Nutrition: An example for a sustainable diet. *Proceedings of the Nutrition Society*, 76(1), 34–41. <https://doi.org/10.1017/S0029665116000616>
- Konuk, F. A. (2019). Consumers' willingness to buy and willingness to pay for fair trade food: The influence of consciousness for fair consumption, environmental concern, trust and innovativeness. *Food Research International*, 120, 141–147. <https://doi.org/10.1016/j.foodres.2019.02.018>
- Kuchinka, D. G. J., Balazs, S., Gavriletea, M. D., & Djokic, B.-B. (2018). Consumer Attitudes toward Sustainable Development and Risk to Brand Loyalty. *Sustainability*, 10(4), Article 4. <https://doi.org/10.3390/su10040997>
- Kwon, W.-S., Englis, B., & Mann, M. (2016). Are third-party green–brown ratings believed?: The role of prior brand loyalty and environmental concern. *Journal of Business Research*, 69(2), 815–822. <https://doi.org/10.1016/j.jbusres.2015.07.008>
- Lahtinen, S., & Närvänen, E. (2020). Co-creating sustainable corporate brands: A consumer framing approach. *Corporate Communications: An International Journal*, 25(3), 447–461. <https://doi.org/10.1108/CCIJ-11-2019-0121>
- Lazzarini, G. A., Visschers, V. H. M., & Siegrist, M. (2017). Our own country is best: Factors influencing consumers' sustainability perceptions of plant-based foods. *Food Quality and Preference*, 60, 165–177. <https://doi.org/10.1016/j.foodqual.2017.04.008>
- Lee, C. K. C., Yap, C. S. F., & Levy, D. S. (2016). Place identity and sustainable consumption: Implications for social marketing. *Journal of Strategic Marketing*, 24(7), 578–593. <https://doi.org/10.1080/0965254X.2016.1148758>
- Lee, J., & Kwon, H.-B. (2019). The synergistic effect of environmental sustainability and corporate reputation on market value added (MVA) in manufacturing firms. *International Journal of Production Research*, 57(22), 7123–7141. <https://doi.org/10.1080/00207543.2019.1578430>
- Lee, K. (2014). Predictors of Sustainable Consumption among Young Educated Consumers in Hong Kong. *Journal of International Consumer Marketing*, 26(3), 217–238. <https://doi.org/10.1080/08961530.2014.900249>
- Lehner, M. (2015). Retail store influence on sustainable consumption behaviour. *International Journal of Quality and Service Sciences*, 7(4), 404–423. <https://doi.org/10.1108/IJQSS-05-2014-0031>
- Liang, T.-C., Situmorang, R. O. P., Liao, M.-C., & Chang, S.-C. (2020). The Relationship of Perceived Consumer Effectiveness, Subjective Knowledge, and Purchase Intention on Carbon Label Products—A Case Study of Carbon-Labeled Packaged Tea Products in Taiwan. *Sustainability*, 12(19), Article 19. <https://doi.org/10.3390/su12197892>
- Lin, Y.-C. (2020). Sustainable food, ethical consumption and responsible innovation: Insights from the slow food and “low carbon food” movements in Taiwan. *Food, Culture & Society*, 23(2), 155–172. <https://doi.org/10.1080/15528014.2019.1682885>

- Liobikienė, G., & Bernatoniene, J. (2017). Why determinants of green purchase cannot be treated equally? The case of green cosmetics: Literature review. *Journal of Cleaner Production*, *162*, 109–120. <https://doi.org/10.1016/j.jclepro.2017.05.204>
- Long, C., & Lin, J. (2018). The impact of corporate environmental responsibility strategy on brand sustainability: An empirical study based on Chinese listed companies. *Nankai Business Review International*, *9*(3), 366–394. <https://doi.org/10.1108/NBRI-08-2017-0044>
- Longo, C., Shankar, A., & Nuttall, P. (2019). “It’s Not Easy Living a Sustainable Lifestyle”: How Greater Knowledge Leads to Dilemmas, Tensions and Paralysis. *Journal of Business Ethics*, *154*(3), 759–779. <https://doi.org/10.1007/s10551-016-3422-1>
- Luchs, M. G., Phipps, M., & Hill, T. (2015). Exploring consumer responsibility for sustainable consumption. *Journal of Marketing Management*, *31*(13–14), 1449–1471. <https://doi.org/10.1080/0267257X.2015.1061584>
- Luo, B., Sun, Y., Shen, J., & Xia, L. (2020). How does green advertising skepticism on social media affect consumer intention to purchase green products? *Journal of Consumer Behaviour*, *19*(4), 371–381. <https://doi.org/10.1002/cb.1818>
- Mai, R., Hoffmann, S., Lasarov, W., & Buhs, A. (2019). Ethical Products = Less Strong: How Explicit and Implicit Reliance on the Lay Theory Affects Consumption Behaviors. *Journal of Business Ethics*, *158*(3), 659–677. <https://doi.org/10.1007/s10551-017-3669-1>
- Malik, C., & Singhal, N. (2017). Consumer Environmental Attitude and Willingness to Purchase Environmentally Friendly Products: An SEM Approach. *Vision*, *21*(2), 152–161. <https://doi.org/10.1177/0972262917700991>
- Mancini, P., Marchini, A., & Simeone, M. (2017). Which are the sustainable attributes affecting the real consumption behaviour? Consumer understanding and choices. *British Food Journal*, *119*(8), 1839–1853. <https://doi.org/10.1108/BFJ-11-2016-0574>
- Mandliya, A., Varyani, V., Hassan, Y., Akhouri, A., & Pandey, J. (2020). What influences intention to purchase sustainable products? Impact of advertising and materialism. *International Journal of Productivity and Performance Management*, *69*(8), 1647–1669. <https://doi.org/10.1108/IJPPM-12-2019-0591>
- Mangini, E. R., Amaral, L. M., Conejero, M. A., & Pires, C. S. (2020). Greenwashing Study and Consumers’ Behavioral Intentions. *Consumer Behavior Review*, *4*(3), 229–244.
- Marckhgott, E., & Kamleitner, B. (2019). Matte matters: When matte packaging increases perceptions of food naturalness. *Marketing Letters*, *30*(2), 167–178. <https://doi.org/10.1007/s11002-019-09488-6>
- Martino, J. D., Nanere, M. G., & DSouza, C. (2019). The effect of pro-environmental attitudes and eco-labelling information on green purchasing decisions in Australia. *Journal of Nonprofit & Public Sector Marketing*, *31*(2), 201–225. <https://doi.org/10.1080/10495142.2019.1589621>
- Mo, Z., Liu, M. T., & Liu, Y. (2018). Effects of functional green advertising on self and others. *Psychology & Marketing*, *35*(5), 368–382. <https://doi.org/10.1002/mar.21092>
- Moisescu, O.-I. (2018). From perceptual corporate sustainability to customer loyalty: A multi-sectorial investigation in a developing country. *Economic Research-Ekonomska Istraživanja*, *31*(1), 55–72. <https://doi.org/10.1080/1331677X.2017.1421998>
- Moore, M. M., & Yang, J. Z. (2020). Using Eco-Guilt to Motivate Environmental Behavior Change. *Environmental Communication*, *14*(4), 522–536. <https://doi.org/10.1080/17524032.2019.1692889>
- Muniz, F., Guzmán, F., Paswan, A. K., & Crawford, H. J. (2019). The immediate effect of corporate social responsibility on consumer-based brand equity. *Journal of Product & Brand Management*, *28*(7), 864–879. <https://doi.org/10.1108/JPBM-09-2018-2016>
- Muñoz, P., & Cohen, B. (2018). Entrepreneurial Narratives in Sustainable Venturing: Beyond People, Profit, and Planet. *Journal of Small Business Management*, *56*(S1), 154–176. <https://doi.org/10.1111/jsbm.12395>

- Nair, S. R., & Little, V. J. (2016). Context, Culture and Green Consumption: A New Framework. *Journal of International Consumer Marketing*, 28(3), 169–184. <https://doi.org/10.1080/08961530.2016.1165025>
- Nassivera, F., & Sillani, S. (2017). Consumer Behavior Toward Eco-Labeled Minimally Processed Fruit Product. *Journal of International Food & Agribusiness Marketing*, 29(1), 29–45. <https://doi.org/10.1080/08974438.2016.1241734>
- Nekmahmud, M., & Fekete-Farkas, M. (2020). Why Not Green Marketing? Determinates of Consumers' Intention to Green Purchase Decision in a New Developing Nation. *Sustainability*, 12(19), Article 19. <https://doi.org/10.3390/su12197880>
- Nia, B. P., Dyah, I. R., Hery, S., & Bayu, D. S. (2018). The Effect of Green Purchase Intention Factors on The Environmental Friendly Detergent Product (Lerak). *E3S Web of Conferences*, 73, 06007. <https://doi.org/10.1051/e3sconf/20187306007>
- Nosi, C., Zollo, L., Rialti, R., & Ciappei, C. (2020). Sustainable consumption in organic food buying behavior: The case of quinoa. *British Food Journal*, 122(3), 976–994. <https://doi.org/10.1108/BFJ-09-2019-0745>
- Onel, N. (2017). Pro-environmental Purchasing Behavior of Consumers: The Role of Norms. *Social Marketing Quarterly*, 23(2), 103–121. <https://doi.org/10.1177/1524500416672440>
- Pandey, P. C. (2020). Circular Designing and Green Growth: Insights on Future of Sustainability. *Vision*, 24(1), 113–117. <https://doi.org/10.1177/0972262920903904>
- Paparoidamis, N. G., & Tran, H. T. T. (2019). Making the world a better place by making better products: Eco-friendly consumer innovativeness and the adoption of eco-innovations. *European Journal of Marketing*, 53(8), 1546–1584. <https://doi.org/10.1108/EJM-11-2017-0888>
- Papista, E., Chrysochou, P., Krystallis, A., & Dimitriadis, S. (2018). Types of value and cost in consumer–green brands relationship and loyalty behaviour. *Journal of Consumer Behaviour*, 17(1), e101–e113. <https://doi.org/10.1002/cb.1690>
- Pekkanen, T.-L., Pätäri, S., Albadera, L., & Jantunen, A. (2018). Who Cares About Product Sustainability Information at the Moment of Purchase? Consumer Evidence from Three Countries. *Sustainable Development*, 26(3), 229–242. <https://doi.org/10.1002/sd.1697>
- Perera, C., & Hewege, C. (2018). Climate change risk perceptions among green conscious young consumers: Implications for green commodity marketing. *Journal of Consumer Marketing*, 35(7), 754–766. <https://doi.org/10.1108/JCM-01-2018-2537>
- Pérez, A., & García de los Salmenes, M. del M. (2018). How Do Consumers Face the Decision to Buy Fair Trade Products? A Marketing Approach. *Nonprofit and Voluntary Sector Quarterly*, 47(5), 1057–1080. <https://doi.org/10.1177/0899764018776370>
- Petersen, M., & Brockhaus, S. (2017). Dancing in the dark: Challenges for product developers to improve and communicate product sustainability. *Journal of Cleaner Production*, 161, 345–354. <https://doi.org/10.1016/j.jclepro.2017.05.127>
- Prakash, G., Choudhary, S., Kumar, A., Garza-Reyes, J. A., Khan, S. A. R., & 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. <https://doi.org/10.1016/j.jretconser.2019.05.011>
- Randelli, F., & Rocchi, B. (2017). Analysing the role of consumers within technological innovation systems: The case of alternative food networks. *Environmental Innovation and Societal Transitions*, 25, 94–106. <https://doi.org/10.1016/j.eist.2017.01.001>
- Reich, B. J., & Soule, C. A. A. (2016). Green Demarketing in Advertisements: Comparing “Buy Green” and “Buy Less” Appeals in Product and Institutional Advertising Contexts. *Journal of Advertising*, 45(4), 441–458. <https://doi.org/10.1080/00913367.2016.1214649>
- Rezvani, Z., Jansson, J., & Bengtsson, M. (2017). Cause I'll Feel Good! An Investigation into the Effects of Anticipated Emotions and Personal Moral Norms on Consumer Pro-Environmental

- Behavior. *Journal of Promotion Management*, 23(1), 163–183. <https://doi.org/10.1080/10496491.2016.1267681>
- Rodrigues, D. B., Dalmarco, D. de A. S., Aouqi, C., & Marinho, B. de L. (2016). The meaning of the organic certification label for the consumer: A cluster analysis. *REGE - Revista de Gestão*, 23(4), 316–325. <https://doi.org/10.1016/j.rege.2016.08.001>
- Roy, D., Verplanken, B., & Griffin, C. (2015). Making Sense of Sustainability: Exploring the Subjective Meaning of Sustainable Consumption. *Applied Environmental Education & Communication*, 14(3), 187–195. <https://doi.org/10.1080/1533015X.2015.1067581>
- Royne, M. B., Thieme, J., Levy, M., Oakley, J., & Alderson, L. (2016). From thinking green to buying green: Consumer motivation makes the difference. *Journal of Business Strategy*, 37(3), 37–43. <https://doi.org/10.1108/JBS-12-2014-0151>
- Sánchez-Bravo, P., Chambers, E., Noguera-Artiaga, L., López-Lluch, D., Chambers, E., Carbonell-Barrachina, Á. A., & Sendra, E. (2020). Consumers' Attitude towards the Sustainability of Different Food Categories. *Foods*, 9(11), Article 11. <https://doi.org/10.3390/foods9111608>
- Sánchez-Bravo, P., Chambers V, E., Noguera-Artiaga, L., Sendra, E., Chambers IV, E., & Carbonell-Barrachina, Á. A. (2021). Consumer understanding of sustainability concept in agricultural products. *Food Quality and Preference*, 89, 104136. <https://doi.org/10.1016/j.foodqual.2020.104136>
- Santamaria, L., Escobar-Tello, C., & Ross, T. (2016). Switch the channel: Using cultural codes for designing and positioning sustainable products and services for mainstream audiences. *Journal of Cleaner Production*, 123, 16–27. <https://doi.org/10.1016/j.jclepro.2015.09.130>
- Schamp, C., Heitmann, M., & Katzenstein, R. (2019). Consideration of ethical attributes along the consumer decision-making journey. *Journal of the Academy of Marketing Science*, 47(2), 328–348. <https://doi.org/10.1007/s11747-019-00629-x>
- Schiano, A. N., Harwood, W. S., Gerard, P. D., & Drake, M. A. (2020). Consumer perception of the sustainability of dairy products and plant-based dairy alternatives. *Journal of Dairy Science*, 103(12), 11228–11243. <https://doi.org/10.3168/jds.2020-18406>
- Schmuck, D., Matthes, J., Naderer, B., & Beaufort, M. (2018). The Effects of Environmental Brand Attributes and Nature Imagery in Green Advertising. *Environmental Communication*, 12(3), 414–429. <https://doi.org/10.1080/17524032.2017.1308401>
- Seghezze, L. (2009). The five dimensions of sustainability. *Environmental Politics*, 18(4), 539–556. <https://doi.org/10.1080/09644010903063669>
- Seifi, S., Zulkifli, N., Yusuff, R., & Sullaiman, S. (2012). Information requirements for sustainable consumption. *Social Responsibility Journal*, 8(3), 433–441. <https://doi.org/10.1108/17471111211248009>
- Servera-Francés, D., & Piqueras-Tomás, L. (2019). The effects of corporate social responsibility on consumer loyalty through consumer perceived value. *Economic Research-Ekonomska Istraživanja*, 32(1), 66–84. <https://doi.org/10.1080/1331677X.2018.1547202>
- Setyawan, A., Noermijati, N., Sunaryo, S., & Aisjah, S. (2018). Green product buying intentions among young consumers: Extending the application of theory of planned behavior. *Problems and Perspectives in Management*, 16(2), 145–154. [https://doi.org/10.21511/ppm.16\(2\).2018.13](https://doi.org/10.21511/ppm.16(2).2018.13)
- Sharma, N., & Lal, M. (2020). Facades of morality: The role of moral disengagement in green buying behaviour. *Qualitative Market Research: An International Journal*, 23(2), 217–239. <https://doi.org/10.1108/QMR-03-2019-0030>
- Shatnawi, Y., & Chin, T. A. (2019). Bird's-eye view of the environmental attitude types in the sustainable consumption context. *Environmental Quality Management*, 28(4), 15–20. <https://doi.org/10.1002/tqem.21638>
- Sheth, J. N., & Parvatiyar, A. (2021). Sustainable Marketing: Market-Driving, Not Market-Driven. *Journal of Macromarketing*, 41(1), 150–165. <https://doi.org/10.1177/0276146720961836>

- Silva, A. R. de A., Bioto, A. S., Efraim, P., & Queiroz, G. de C. (2017). Impact of sustainability labeling in the perception of sensory quality and purchase intention of chocolate consumers. *Journal of Cleaner Production*, *141*, 11–21. <https://doi.org/10.1016/j.jclepro.2016.09.024>
- Silva, M. E., Sousa-Filho, J. M. de, Yamim, A. P., & Diógenes, A. P. (2020). Exploring nuances of green skepticism in different economies. *Marketing Intelligence & Planning*, *38*(4), 449–463. <https://doi.org/10.1108/MIP-10-2018-0435>
- Simpson, B. J. K., & Radford, S. K. (2012). Consumer Perceptions of Sustainability: A Free Elicitation Study. *Journal of Nonprofit & Public Sector Marketing*, *24*(4), 272–291. <https://doi.org/10.1080/10495142.2012.733654>
- Singh, J. J., Garg, N., Govind, R., & Vitell, S. J. (2018). Anger Strays, Fear Refrains: The Differential Effect of Negative Emotions on Consumers' Ethical Judgments. *Journal of Business Ethics*, *151*(1), 235–248. <https://doi.org/10.1007/s10551-016-3248-x>
- Song, Y., Qin, Z., & Qin, Z. (2020). Green Marketing to Gen Z Consumers in China: Examining the Mediating Factors of an Eco-Label-Informed Purchase. *SAGE Open*, *10*(4), 2158244020963573. <https://doi.org/10.1177/2158244020963573>
- Stancu, C. M., Grønhoj, A., & Lähteenmäki, L. (2020). Meanings and Motives for Consumers' Sustainable Actions in the Food and Clothing Domains. *Sustainability*, *12*(24), Article 24. <https://doi.org/10.3390/su122410400>
- Steenis, N. D., van der Lans, I. A., van Herpen, E., & van Trijp, H. C. M. (2018). Effects of sustainable design strategies on consumer preferences for redesigned packaging. *Journal of Cleaner Production*, *205*, 854–865. <https://doi.org/10.1016/j.jclepro.2018.09.137>
- Sun, W., & Price, J. M. (2016). The impact of environmental uncertainty on increasing customer satisfaction through corporate social responsibility. *European Journal of Marketing*, *50*(7/8), 1209–1238. <https://doi.org/10.1108/EJM-02-2015-0077>
- Swenson, R., & Olsen, N. (2018). Food for Thought: Audience Engagement with Sustainability Messages in Branded Content. *Environmental Communication*, *12*(7), 973–988. <https://doi.org/10.1080/17524032.2017.1279202>
- Tandon, A., Dhir, A., Kaur, P., Kushwah, S., & Salo, J. (2020). Why do people buy organic food? The moderating role of environmental concerns and trust. *Journal of Retailing and Consumer Services*, *57*, 102247. <https://doi.org/10.1016/j.jretconser.2020.102247>
- Taufique, K. M. R., Siwar, C., Chamhuri, N., & Sarah, F. H. (2016). Integrating General Environmental Knowledge and Eco-Label Knowledge in Understanding Ecologically Conscious Consumer Behavior. *Procedia Economics and Finance*, *37*, 39–45. [https://doi.org/10.1016/S2212-5671\(16\)30090-9](https://doi.org/10.1016/S2212-5671(16)30090-9)
- Tollin, K., & Christensen, L. B. (2019). Sustainability Marketing Commitment: Empirical Insights About Its Drivers at the Corporate and Functional Level of Marketing. *Journal of Business Ethics*, *156*(4), 1165–1185. <https://doi.org/10.1007/s10551-017-3591-6>
- United Nations General Assembly (2015) *Transforming Our World: The 2030 Agenda for Sustainable Development* (Document A/RES/70/1).
- Uddin, S. M. F., & Khan, M. N. (2018). Young Consumer's Green Purchasing Behavior: Opportunities for Green Marketing. *Journal of Global Marketing*, *31*(4), 270–281. <https://doi.org/10.1080/08911762.2017.1407982>
- Ulusoy, E., & Barretta, P. G. (2016). How green are you, really? Consumers' skepticism toward brands with green claims. *Journal of Global Responsibility*, *7*(1), 72–83. <https://doi.org/10.1108/JGR-11-2015-0021>
- Upadhye, B. D., Das, G., & Varshneya, G. (2019). Corporate social responsibility: A boon or bane for innovative firms? *Journal of Strategic Marketing*, *27*(1), 50–66. <https://doi.org/10.1080/0965254X.2017.1384042>
- Uren, H. V., Dzidic, P. L., Roberts, L. D., Leviston, Z., & Bishop, B. J. (2019). Green-Tinted Glasses: How Do Pro-Environmental Citizens Conceptualize Environmental Sustainability? *Environmental Communication*, *13*(3), 395–411. <https://doi.org/10.1080/17524032.2017.1397042>

- Usrey, B., Palihawadana, D., Saridakis, C., & Theotokis, A. (2020). How Downplaying Product Greenness Affects Performance Evaluations: Examining the Effects of Implicit and Explicit Green Signals in Advertising. *Journal of Advertising*, 49(2), 125–140. <https://doi.org/10.1080/00913367.2020.1712274>
- Valor, C., Antonetti, P., & Carrero, I. (2018). Stressful sustainability: A hermeneutic analysis. *European Journal of Marketing*, 52(3/4), 550–574. <https://doi.org/10.1108/EJM-12-2016-0712>
- van, G. R., & Leenheer, J. (2019). Towards more interactive and sustainable food retailing: An empirical case study of the supermarket of the future. *International Journal of Retail & Distribution Management*, 47(1), 55–75. <https://doi.org/10.1108/IJRDM-11-2017-0280>
- van Giesen, R., & Leenheer, J. (2018). Towards more interactive and sustainable food retailing: An empirical case study of the supermarket of the future. *International Journal of Retail & Distribution Management*, 47(1), 55–75. <https://doi.org/10.1108/IJRDM-11-2017-0280>
- Venhoeven, L. A., Bolderdijk, J. W., & Steg, L. (2020). Why going green feels good. *Journal of Environmental Psychology*, 71, 101492. <https://doi.org/10.1016/j.jenvp.2020.101492>
- Vlad, V. C., & Luca, F.-A. (2020). Delivering Sustainability—Green Marketing Evolution. *Network Intelligence Studies*, VIII(16 (2/2020)), 169–179.
- Vredenburg, J., Kapitan, S., Spry, A., & Kemper, J. A. (2020). Brands Taking a Stand: Authentic Brand Activism or Woke Washing? *Journal of Public Policy & Marketing*, 39(4), 444–460. <https://doi.org/10.1177/0743915620947359>
- Wahab, Z., Tama, R., Shihab, M., Widad, A., Nofiawaty, N., & Diah, Y. (2017). Analysis The Effect Of Enviromental Concern And Green Advertising To Green Purchasing In Palembang City. *SRIWIJAYA INTERNATIONAL JOURNAL OF DYNAMIC ECONOMICS AND BUSINESS*, 1, 297. <https://doi.org/10.29259/sijdeb.v1i3.22>
- Waites, S. F., Stevens, J. L., & Hancock, T. (2020). Signaling green: Investigating signals of expertise and prosocial orientation to enhance consumer trust. *Journal of Consumer Behaviour*, 19(6), 632–644. <https://doi.org/10.1002/cb.1867>
- Walshe, N. (2013). Exploring and developing student understandings of sustainable development. *The Curriculum Journal*, 24(2), 224–249. <https://doi.org/10.1080/09585176.2013.781388>
- Wang, H., Ma, B., & Bai, R. (2019). How Does Green Product Knowledge Effectively Promote Green Purchase Intention? *Sustainability*, 11(4), Article 4. <https://doi.org/10.3390/su11041193>
- Wang, J., Nguyen, N., & Bu, X. (2020). Exploring the Roles of Green Food Consumption and Social Trust in the Relationship between Perceived Consumer Effectiveness and Psychological Wellbeing. *International Journal of Environmental Research and Public Health*, 17(13), Article 13. <https://doi.org/10.3390/ijerph17134676>
- Wei, C.-F., Chiang, C.-T., Kou, T.-C., & Lee, B. C. Y. (2017). Toward Sustainable Livelihoods: Investigating the Drivers of Purchase Behavior for Green Products. *Business Strategy and the Environment*, 26(5), 626–639. <https://doi.org/10.1002/bse.1942>
- White, K., Habib, R., & Hardisty, D. J. (2019). How to SHIFT Consumer Behaviors to be More Sustainable: A Literature Review and Guiding Framework. *Journal of Marketing*, 83(3), 22–49. <https://doi.org/10.1177/0022242919825649>
- Witek, L. (2019). Attitude-Behaviour Gap Among Polish Consumers Regarding Green Purchases. *Visegrad Journal on Bioeconomy and Sustainable Development*, 8(1), 31–36. <https://doi.org/10.2478/vjbsd-2019-0006>
- Wongprawmas, R., Pappalardo, G., Canavari, M., & Pecorino, B. (2016). Willingness-to-Pay for Multiple Units of Eco-Friendly Wheat-Derived Products: Results From Open-Ended Choice Experiments. *Journal of Food Products Marketing*, 22(6), 658–682. <https://doi.org/10.1080/10454446.2015.1121438>
- Wu, H.-C., Wei, C.-F., Tseng, L.-Y., & Cheng, C.-C. (2018). What drives green brand switching behavior? *Marketing Intelligence & Planning*, 36(6), 694–708. <https://doi.org/10.1108/MIP-10-2017-0224>

- Yang, Z., Sun, J., Zhang, Y., Wang, Y., & Cao, L. (2017). Employees' collaborative use of green information systems for corporate sustainability: Motivation, effort and performance. *Information Technology for Development*, 23(3), 486–506. <https://doi.org/10.1080/02681102.2017.1335281>
- Yngfalk, C. (2019). Subverting sustainability: Market maintenance work and the reproduction of corporate irresponsibility. *Journal of Marketing Management*, 35(17–18), 1563–1583. <https://doi.org/10.1080/0267257X.2019.1682031>
- Yu, J. (2020). Consumer responses toward green advertising: The effects of gender, advertising skepticism, and green motive attribution. *Journal of Marketing Communications*, 26(4), 414–433. <https://doi.org/10.1080/13527266.2018.1514317>