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BARRIERS INFLUENCING PURCHASE BEHAVIOUR OF GREEN PERSONAL CARE PRODUCTS – INTEGRATING INNOVATION RESISTANCE THEORY PERSPECTIVE AND STAGES OF CHANGE MODEL

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ABSTRACT: The study aimed to identify and explain perceived barriers to green consumption at different stages of behaviour change by integrating the Innovation Resistance Theory (IRT) and Stages of Behavioural Change (SOC) model. Through 20 in-depth interviews with consumers transitioning to green consumption at various stages, several barriers were identified. The knowledge barrier played a crucial role in shaping the adaptation process at every stage of change and was recognized as an independent construct within the IRT framework. Moreover, the research revealed that barriers such as tradition, value, usage, and risk exerted a stronger inhibitory effect in the early stages of green consumption, while knowledge and image barriers evolved and had a distinct impact as consumers progressed through the stages. The study also highlighted triggers that positively stimulated green consumption. These findings have implications for green marketing and can guide targeted interventions to promote sustainable consumption more effectively.

KEYWORDS: innovation resistance theory, stages of change model, green consumption barriers, green personal care products

Introduction

Growing environmental pressure is causing changes in human needs and values. Social ethics can no longer be neglected by manufacturers (D'Attoma & Ieva, 2020). The call for sustainability has become a major driver of pro-environmental innovations (Varadarajan, 2017). According to Diepenmaat et al. (2020), sustainability transition requires socio-cultural changes in norms and values, stimulating adaptation of new technology and sustainable consumption alternatives. Acceptance of sustainable innovations on the market is slow and requires a long-term perspective (Dearing, 2000). During the last decade, despite intense efforts causing a significant increase in public awareness and pro-environmental attitudes, there has been no significant or satisfactory change in social behaviour (Fudge & Peters, 2011; Moloney & Strengers, 2014). Identifying the sources of resistance (i.e., perceived barriers) to green consumption, as well as the mechanisms behind the behavioural change process, is, therefore, crucial and demands more attention from researchers (Joshi & Rahman, 2015). This globally observable resistance to change towards green alternatives may be compared to resistance towards innovation. In overcoming existing barriers, individuals are stimulated by external (messages from the environment) and internal factors (beliefs about the validity of purchase choices) (Joshi & Rahman, 2015). The aim of the following study is to trace purchase resistance inhibitors at each stage of change towards green consumption within the context of Fast Moving Consumer Goods (FMCG). This will be achieved by applying the Innovation Resistance Theory (IRT) developed by Ram and Sheth (1989) and the Stages of Behavioural Change (SOC) model, also known as the "wheel of change," a fundamental construct of the Transtheoretical Model of Change (Prochaska & DiClemente, 1982).

The study is deliberately focused on one category of Green Personal Care Products (GPCPs) due to the booming high volume of sales concerning personal care products recorded worldwide (Klaschka, 2016). The future of the ecosystem is largely dependent on agile intervention capable of dynamically accelerating subscriptions to GPCPs consumption. Consumer barriers to this category of green products have not yet been exhaustively explored by researchers, whereas the green food market has already lived to see hundreds of studies focusing on the analysis of barriers and motives determining consumer behaviour (Bryła, 2016; Buder et al., 2014; Kushwah et al., 2019). In recent publications, there has been a call for shifting the research burden on green consumption of FMCGs from food to non-food products (Niedermeier et al., 2021a, 2021b).

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This presented article is organised in the following manner: in the "Theoretical foundations and research questions" section, we give an overview of the sufficient literature and discuss the background theoretical approaches, followed by a proposal for research questions. In the "Methods" section, an overview is given of the research methods. Next, in the 'Results' section, the analysis and results of the research question testing are presented. Afterwards, in "Findings and Discussion", we discuss the main findings of the study and highlight the theoretical as well as practical implications. The paper ends with "Conclusions and future research", where implications for theory, as well as practice, limitations and recommendations for further areas of research, are indicated.

Theoretical foundations

Innovation Resistance Theory (IRT)

Barriers to sustainable consumption are the subject of intense research and discussion (Niedermeier et al., 2021a; Tan et al., 2016). As early as 1990, Bänsch proposed a list of quite universal and timeless factors determining and limiting green consumption, i.e. doubts about authenticity, image, aesthetic aspects, habits, availability, price, lack of efficiency and of faith in the relevance of such consumer action (Bänsch, 1990). It is puzzling that despite the passage of more than 30 years, these barriers continue to determine green purchasing behaviour resistance, as evidenced by (Kushwah et al., 2019), regardless of the rapid growth in awareness concerning the seriousness of risks generated by unsustainable social behaviour (Sandler, 2012). However, there is a gap in knowledge on the strength and nature of the impact these barriers have, depending on the stage of change towards green consumption.

In order to better understand the resistance of consumers towards green product innovations, Innovation Resistance Theory (IRT) has been implemented in our study (Kaur et al., 2021; Ram & Sheth, 1989). This resistance to the adaptation of innovative behaviour is defined as resistance to changing the status quo by adopting an innovation, understood as a departure from existing beliefs (Kaur et al., 2021). IRT, postulated by Ram and Sheth (1989), aids in understanding how resistance to a behaviour change is formed.

The IRT theoretical lens allows us to classify barriers according to innovation by dividing them into those functional and psychological. Functional barriers come forth when the observed functions or attributes of innovation are not in perfect agreement with consumer expectations. Psychological barriers become visible in cases where perceived attributes of innovation cause

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conflict or psychological issues among consumers. Therefore, the theory allows suggesting that "resistance may occur when the innovation disrupts established routines, habits, traditions and norms of consumers, or induces conflict with consumers' briefs, values and faith" (Ma & Lee, 2019). It should be noted that there is a lack of consistency regarding opinions on the final classification of resistance barriers. According to Talke and Heidenreich (2014), the risk barrier can also be classified as a psychological one instead of the IRT authors' original assignment to functional barriers. In another study by Santos and Ponchio (2021), additional factors beyond the IRT construct were identified. The study positively verified the effects of emotional barriers when studying opposition to digital banking services. Thus, in identifying the barriers determining resistance, the category of products or services containing a certain degree of innovation is of great importance (Santos & Ponchio, 2021).

Stages of Change Model (SOC)

When analysing resistance to a green product such as innovations, following the research by Cornescu and Adam (2013), four pillars of determinants which may influence attitudes or behaviours should be taken into account: (1) perceptions of innovation characteristics, (2) consumer psychological characteristics, (3) propagation mechanisms (nature of the market and propagation channels) and (4) the influence of opinion leaders. However, to obtain a better comprehension of the mechanisms shaping resistance and change processes, this analysis should take place at multiple levels, separately analysing groups of individuals according to the status of their current intentions and behaviours, which has not been done in earlier studies. This objective can be achieved via the Stages of Change Model by dividing consumers according to the stage of change towards green consumption.

Stages of Change Model (SOC), conceptualised as the central organising construct of the Transtheoretical Model (TTM) (Bridle et al., 2005), was developed by Prochaska and DiClemente (Prochaska & DiClemente, 1982). The rudimentary premise of the TTM model is that individuals undergoing behavioural change continually analyse the advantages and disadvantages of undertaking such change (Prochaska et al., 1988). According to this model, often called the "wheel of change", people do not modify their behaviour in dynamic and decisive terms. This change is a cyclical process at the level of 5 stages of change (SOC): (1) pre-contemplation, (2) contemplation, (3) preparation, (4) action and (5) maintenance. At each of these stages, they experience different internal and external stimuli, depending on the nature and strength of the impact, convincing them to change their behaviour or discourage them from progressing. The SOC model is used to segment a certain

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population into groups on the basis of the status of the person subjected to the process of change (Arnaudova et al., 2022) and is often applied as a separate tool beyond the context of the Transtheoretical Model (Lacey & Street, 2017). In the research by Gatersleben and Appleton (2007), it has been indicated that perceptions of personal and external barriers change as individuals progress and move on the "wheel of change" from pre-contemplation to action. Resistance to change at each stage requires developing a different intervention depending on the context and motives behind it. This leads to the assumption that different variables shape behaviour at each stage of change. Thus, the optimal intervention should respond to the specifics of the clusters.

In some studies, it has been indicated that combining continuous models as well as stage models can aid in the explanation regarding the process of behavioural change (Forward, 2014). Therefore, the aim of our study is to explore determinants shaping the process of change towards green product consumption through the utilisation of the IRT and SOC models. In the past, the two constructs have been applied individually when comparing IRT barriers with green consumption (Sadiq et al., 2021), meat consumption (Arnaudova et al., 2022), or with the usage of the SOC model – vegetable consumption (Ahn & Kim, 2012), cycling to work (Gatersleben & Appleton, 2007) and undertaking physical activity (Romain et al., 2018). To the researchers' knowledge, the two constructs have not been applied simultaneously to analyse the determinants of green consumption. Integrating the complementary aspects of these two theoretical frameworks provided the basis for assigning barriers from the IRT construct to all phases of the SOC change process. An in-depth qualitative study makes it possible to verify the adaptability of the two theoretical frameworks in the field of green consumption and to provide answers for the posed research questions arising from an analysis of literature on the subject.

Research questions

In tandem with the growing debate about the barriers inhibiting green consumption, many current researchers are calling for more qualitative and experimental design studies to identify factors that may reduce the green gap found between attitudes and behaviours (ElHaffar et al., 2020). Moreover, despite the existing research verifying the influence of IRT barriers on green product purchase intention (Sadiq et al., 2021), no attempt has been made to explore the specifics of these barriers or the strength of their impact at different stages of transition towards green consumption. Closing an intention-behavioural gap would not be possible without an attempt to understand the

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complexity of that behavioural process and the nature of the phenomena by applying a qualitative method (Wiederhold & Martinez, 2018). The objective of this study, therefore, is to subject this process to in-depth analysis and make inferences based on an analysis of the various stages of the process in order to understand the barriers in the adoption of sustainable consumption that determine each stage with the application of SOC and IRT theories.

To address this gap in research and contribute to scientific literature as well as the knowledge of marketers, this research is an attempt to obtain a more concise understanding of the factors that shape consumer resistance and purchase intentions at different stages of change (SOC) towards green consumption and within the context of one FMCG category (Figure 1). To better comprehend the issue, a qualitative study was proposed, guided by four main research questions:

- RQ1: Which IRT barriers can be identified within the context of green FMCG consumption?
- RQ2: Which inhibitors of green purchase behaviour are present at different stages of change (SOC) towards FMCG consumption?
- RQ3: Why do some barriers seem to be stronger at different stages of change (SOC) towards green FMCG consumption?
- RG4: What other factors than those within the IRT theory construct are the source of resistance at all stages of change (SOC)?

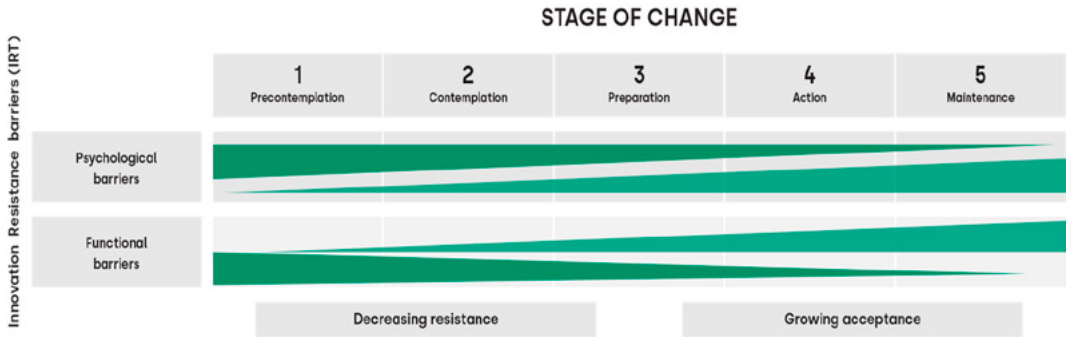

Figure 1. Integration of SOC and IRT – a conceptual model

The study is focused on analysing barriers to a selected category of FMCG products, as suggested by previous research in which discrepancies have been indicated in the obtained results depending on the green categories studied (Liobikienė & Bernatonienė, 2017).

Globally, the dominant FMCG category adapting to intense market changes is Personal Care Products (PCPs). Interest in GPCPs has experienced

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an increase due to various concerns connected with conventional PCPs, such as environmental, health-related and ethical concerns, respectively (Cervellon & Carey, 2020). Many cases involving recognisable manufacturers have been reported, where PCPs were linked to causing ovarian cancer (Jacob et al., 2018), hormone disruptions (Fujii et al., 2013; Koniecki et al., 2011) or migraines, asthma and dermatitis (Steinemann, 2017, 2018). Emerging green alternatives are often free of any residual chemicals, fertilisers or pesticides and genetically-modified organisms, etc. (Goyal & Jerold, 2021). GPCPs are interpreted as those being of natural composition, produced in an environmentally-friendly way, and free of chemical additives and synthetic colours (Klaschka, 2016; Moscato & Machin, 2018).

As far as GPCPs are perceived as innovations on the market (Lin et al., 2018), the process of adapting to a more sustainable purchasing behaviour can be compared to adopting an innovation. This may be understood as a product innovation adaptation (Melander, 2017) or even social innovation adaptation (Jaeger-Erben et al., 2015), both intending to lessen environmental impact. This adaptation requires changes in day-to-day behaviour and disrupts consumption habits, while "innovation that is successful does not comprise of bowing down to the resistance of consumers, but rather comprehending its reasons and creating marketing strategies used to address them" (Ram & Sheth, 1989, p. 13).

Methods

Due to the fact that the main objective of this study is to broaden knowledge on barriers hindering consumers at five stages of the green consumption adaptation process, and given that there are no qualitative studies in which the phenomenon would be analysed using IRT combined with the SOC behavioural change model, a qualitative study was chosen in this case. To interpret meaning from the barriers experienced by individuals at different stages of adaptation in the process of green consumption (Willig, 2017), semi-structured, in-depth interviews were performed.

Despite the belief that results from qualitative research analyses are non-generalisable and limited by the subjective interpretation of the researcher (Damaskinidis, 2017), there is consensus indicating that this type of research generates insights into understanding context-specific determinants (Bell et al., 2022).

Participants were recruited using purposeful sampling: intentional identification of information-rich cases having first-hand experience with the phenomena under study (Palinkas et al., 2015). Since purposeful sampling carries the risk of potential bias or sampling error, interviews were contin-

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ued until data saturation was achieved (Saunders et al., 2018). Also, Glaser and Strauss (1967) emphasise that in qualitative research, data is accumulated until theoretical saturation is reached, i.e. when new respondents consistently begin to repeat previous observations/inferences. Although Creswell (1998) indicates that qualitative interviews should be conducted among 20-30 respondents, there is a lack of evidence and grounds for such samples. Therefore, in the case of this type of research methodology as in applied in that research, one can rely on the idea of sample saturation (Olejnik & Stefańska, 2022). Non-probabilistic (non-random) selection methods were used: selection based on respondent's availability. Research questions were directed at understanding attitudes and consumers' perceived barriers to green consumption adoption and the stimulants that determine change, but researchers also paid attention to the context of statements to capture factors not consciously expressed.

This study was conducted with Poland-based participants over a two-month period. Participants were residents of both the metropolitan city and adjacent smaller cities. Each respondent, in order to take part in the study, had to meet certain assumptions verified at the stage of the recruitment questionnaire, i.e. age 27-54, no direct associations with the cosmetics industry, responsibility for purchases of the product category under study in their household, and represent a certain stage of change towards green consumption of the category under study. The recruitment survey included an explanation of the specifics regarding the GPCPs product category under study. The participants' perception concerning the stage of readiness towards behavioural change in the consumption of GPCPs was assessed using the SOC scale, adapted from Cunha et al. (2015).

Table 1. Stages of change (SOC) towards Green Personal Care Products Consumption

TTM Stages of Change (SOC) towards green consumption	Do you use green personal care products? Cunha et al. (2015)
SOC 1 (Pre-contemplation)	No, I am not thinking about making a change from conventional personal care products to greener ones
SOC 2 (Contemplation)	No, but I am considering buying greener personal care products, however, I am still not convinced
SOC 3 (Preparation)	No, but I have decided to change my habits in this area and buy greener personal care products, however, I am wondering how to do this
SOC 4 (Action)	Yes, I am in the process of changing my habits in this area but I am experiencing difficulties
SOC 5 (Maintenance)	Yes, I have already changed my habits and buy green personal care products regularly

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With the intention of verifying the interview script, a pilot survey was carried out beforehand among three groups of students. The script was also consulted with two experts on qualitative research methods. The final version of the script obtained approval from the Commission of Ethics.

The sessions began by introducing and explaining the trial. This was followed by open-ended questions aimed at understanding consumers' experiences with GPCPs, and reasons for rejecting or subscription to green alternatives. There were questions from the IRT theoretical framework within the scenario structure, but respondents were free to shape their statements. Moreover, participants were encouraged to explain the context and background of their statements as the researchers intended to capture the broader background and hidden motivations.

Table 2. Sample characteristics

Participant	Sex	Education	Stage of change	Age Group	Category involvement
1	Male	Higher education	(2) Contemplation	24-34	No
2	Female	Higher education	(5) Maintenance	35-44	Yes
3	Female	High School	(2) Contemplation	35-44	No
4	Female	Higher education	(5) Maintenance	24-34	Yes
5	Female	Higher education	(4) Action	24-34	Yes
6	Female	High School	(2) Contemplation	24-34	No
7	Female	High School	(4) Action	45-54	Yes
8	Male	High School	(1) Pre-contemplation	45-54	No
9	Male	Higher education	(2) Contemplation	35-44	Yes
10	Male	Higher education	(4) Action	35-44	Yes
11	Male	Higher education	(4) Action	35-44	Yes
12	Female	Higher education	(3) Preparation	45-54	No
13	Male	Higher education	(1) Pre-contemplation	24-34	No
14	Female	Higher education	(5) Maintenance	24-34	Yes
15	Female	Higher education	(4) Action	24-34	Yes
16	Female	Higher education	(4) Action	35-44	Yes
17	Female	Higher education	(5) Maintenance	24-34	Yes
18	Female	Higher education	(5) Maintenance	35-44	Yes
19	Female	High School	(3) Preparation	24-34	Yes
20	Male	Higher education	(2) Contemplation	35-44	No

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In addition to open-ended questions, graphic presentations of the product category under study were used in the interview in order to liven up the discussion. Each of the interviews lasted 40-60 min. The researchers double-checked the method of coding to minimise bias and find validation of the findings (Spiggle, 1994). Interviews took place online via video platforms. The audio versions of the interviews were recorded and then transcribed. NVivo12 was used in this study. Transcripts were subsequently analysed by content analysis. Important factors and common themes in individual transcripts were identified and coded. Transcripts were compared with each other to observe similarities and differences regarding each answer.

Results

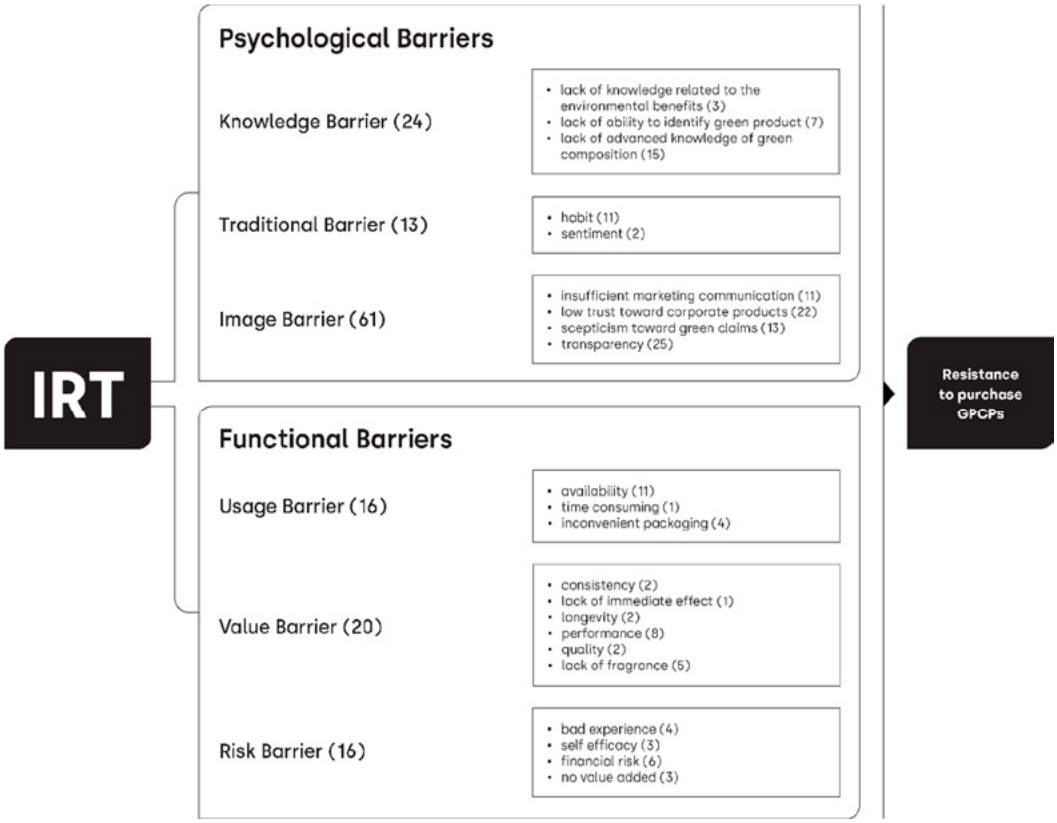

Figure 2. General IRT barrier themes identified and the number of references coded

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On the basis of the IRT proposed by Ram & Sheth (1989), data were analysed thematically. This evaluation was based on semi-structured, individually performed interviews among 20 respondents declaring different SOC towards GPCPs consumption. Using NVivo12, overall emergent themes were formed from 18 subthemes (Figure 2). In the study, the existence was confirmed of all IRT barriers: psychological (traditional, image) and functional (risk, value, usage). An additional psychological barrier identified in our research was the knowledge barrier, which proved to be crucial and most influential at all stages of change following the image barrier.

Psychological barriers

Psychological barriers refer to consumer reactions to attributes connected with an innovative product as a result of internal psychological conflicts arising from established traditions, social norms and usage patterns (Ram & Sheth, 1989). This conflict stems from certain asymmetries that create uncertainty about the consequences of adapting innovations (Kuisma et al., 2007). In the current study, the knowledge barrier was also identified as a key inhibitor of FMCG product green consumption.

Knowledge barrier

The knowledge barrier was categorised by previous researchers as part of the traditional barrier within the IRT construct (Kushwah et al., 2019). This was interpreted to mean that attachment to traditional products led to a lack of anticipated knowledge needed to shift from conventional products to those green (Botonaki et al., 2006).

Whereas in this study, few levels of the knowledge barrier were identified relating to different aspects, stronger at different stages of change. In this research, the knowledge barrier comprises three subthemes: lack of knowledge related to the environmental benefits, inability to identify green products, and limited understanding of green composition. The first two are characteristic for the first initial stages of change (non-buyers), and the third for consumers at later stages of change (occasional buyers, regular buyers). The latter are eager to purchase green alternatives and rarely experience the barrier of tradition. However, consumers suffer from a lack of expert knowledge on the composition of green alternatives allowing them to make optimal purchasing choices within the green category. In other studies, it has been confirmed that the knowledge barrier has an impact on both non-buyers of green alternatives (Xie et al., 2015) and buyers (Bryła, 2018). In light of these findings, it is proposed to isolate the knowledge barrier as a crucial, separate construct of the set of psychological barriers in IRT theory. Its multifaceted nature and intensity of impact require more attention from researchers and

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isolated in-depth analyses as another side of the coin is the usefulness of green information perceived by consumers (Keller & Staelin, 1987). This is understood as information quality, which is another critical aspect being a hugely important piece of the puzzle of the complex mechanisms that shape sustainable knowledge. Green information should be designed to be "complete, persuasive and credible" (Kumar et al., 2021). Understanding these different perspectives will improve the properly conducted stage targeted interventions by design, distribution and application of tailored information among consumers experiencing knowledge barriers at varying degrees and intensities.

It should be noted that the number of references to the knowledge barrier in all interviews, regardless of the stage of change, was high, which further reinforces the belief that more focus is required on the significance of the knowledge barrier in shaping green consumption. Previous studies examining the impact of environmental knowledge on purchase intention have yielded conflicting results (Eze & Ndubisi, 2013; Ramayah et al., 2010), highlighting the need for more conclusive findings (Joshi & Rahman, 2015). Environmental knowledge and consciousness are often assumed to drive green consumption (Schlegelmilch et al., 1996). Gaps in information negatively affect purchase behaviours (Connell, 2010). Researchers often attempt to address this issue by employing quantitative methods that rely on established scales to assess subjective knowledge levels related to the environment and the specific product category. However, these approaches may provide only a superficial verification. During individual interviews, it was revealed that the issue is much more complex. With regard to the product category, it was discovered that distinguishing a GPCPs from a conventional one requires consumers to have almost expert knowledge of biotechnology: the ability to read the formulation and understand which ingredients or packaging parts may be detrimental both to health and the environment.

> *"First of all, I'm guided by the fact that I do not exactly know what ingredients are out there in cosmetics, but I try to choose those that have the shortest possible composition on the back, so that's kind of a determinant for me"* (Participant 1: Action stage).

> *"I bought this green cosmetic some time ago; at least it seems to me green... It is manufactured by a company named "Grassy". The package graphics suggests that it's kind of natural. The first striking features are the long references to nature"* (Participant 12: Preparation stage).

Interpreting green alternatives properly requires a great deal of commitment targeted at finding answers to a countless number of questions. Respondents at higher stages of change towards GPCPs consumption often search for information on expert blogs, vendors channels and publications.

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Therefore, buying and properly selecting a theoretically low-engagement product becomes extremely absorbing and time-consuming.

During interviews, consumers at higher stages of change (action, maintenance) were also mostly characterised by higher overall engagement in the personal care product category (respondents product category involvement level was assessed by the researchers based on analysis of statements referring to a products' search experience and the extent of dedication to the process of search). Consumer knowledge from higher stages of change was significantly greater; however, they still perceived a lack of self-awareness and the inability to verify the product's level of greenness and naturalness.

> *"My knowledge may not necessarily be comprehensive. There is a blog called "SrokaO" – cosmetic analysis, and there is really large database of these cosmetics. I independently type and search for the cosmetic product online to verify its composition, specifically checking whether it contains natural ingredients or is predominantly chemical-based."* (Participant 5: Action stage).

Indeed, in research carried out among green consumers, it has been shown that they tend to engage in seeking information on the social-environmental criteria of brands (McDonald et al., 2009). However, this is dependent on the product category. In this study, it has been confirmed that GPCPs consumers, being at the last two stages of change (maintenance, action), perform such an analysis at both the product and manufacturing brand levels.

It was surprising that none of the 20 respondents recognised international certifications that guarantee the greenness of a cosmetic product.

> *"The certificate's name holds no value for me since I can easily put an "eco-certificate" or a "super quality" label on any package as well. A certificate is just a word, so it is absolutely necessary to have some more industry-specific specialised knowledge to know what's behind it, whether it really has any super value added there or not"* (Participant 4: Pre-contemplation stage).

> *"I certainly don't consider myself as an expert, because you see, even now you're asking about certificates which I didn't pay attention to. I'm more guided by the formulation description on the labels"* (Participant 6: Action stage).

Scholars have proved that knowledge of green products promotes consumer intention to purchase such items (Wang et al., 2019). However, a huge challenge remains in disseminating knowledge about green products to consumers. Understanding the composition described on the back of the package is the most ambiguous aspect for every consumer, yet it is the most frequently indicated element of the package from which respondents consciously derive their information.

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Tradition barrier

The tradition barrier is concerned with consumer reluctance to make changes in his/her routine through behavioural change. This may be related to habit, sentiment and/or satisfaction with traditional products. It is, therefore, negatively related to one's intention to adopt such an innovation (Antioco & Kleijnen, 2010). According to the results of this study, the tradition barrier negatively determines the purchase intention of green alternatives at the initial stages of change (contemplation, pre-contemplation, contemplation) and weakens the transition process.

> *"When I go to a shop, I don't have the time to consider whether something is organic or bio, whether it benefits the environment, or if it's better for my skin. I'm accustomed to purchasing products, especially those advertised by well-known brands whose advertisements I encounter daily."* (Participant 8: Pre-contemplation stage).

At the maintenance and action stages, it no longer negatively determines purchase intentions toward green categories. It has an inhibitory effect on consumers only toward selected subcategories of products for which suitable green alternatives have not been found or to which they are strongly loyal.

> *"You know, when it comes to color cosmetics, I've been using the same tested products for several years, and that's what I stick to. I don't switch them, even though I'm aware that the ingredients may not be ideal. But they work well for me, and I don't feel the need to change everything."* (Participant 7: Action stage).

The traditional barrier manifests differently depending on the customer's position on the "green wheel of change". At the initial stages (pre-contemplation, contemplation, preparation) it is, along with the knowledge barrier, tradition and image barriers, that effectively build resistance. In contrast, at the maintenance and action stages, the traditional barrier appears as a slight limitation in intention towards a narrow range of products, typically fulfilling needs closely tied to visual day-to-day appearance, such as color cosmetics. Consumers explain this by the lack of green alternatives on the market that fully satisfy the need for efficiency and performance. Therefore, first and foremost, consumers are looking for "green quality" to meet their individual needs without sacrificing functional aspects. The concept of green equilibrium is crucial, as it allows for personal gain without necessitating complete sacrifice. It is nevertheless more important than environmental gain (Chwialkowska & Flicinska-Turkiewicz, 2021).

Image barrier

The image barrier refers to an unfavourable image (Mani & Chouk, 2018), meaning attitudes and feelings towards a product, brand and even the place

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of manufacturing. An image barrier can be caused by a lack of trust in a green product and manifests itself as consumer scepticism towards the category (Sadiq et al., 2021). This barrier often arises from a series of green-washing cases observed and experienced by consumers in their daily consumption. In this study, the image barrier was identified under four subthemes: perceived low transparency, scepticism about green products, low trust in corporate green products, and perceived insufficient marketing communication.

At each stage of change, individuals consistently expressed a significant influence of brands' perceived lack of transparency in creating green communications. Scepticism about green claims was similarly shaped. Significantly, the findings of this study highlighted a prominent association between the perceived lack of transparency and corporations offering green products. Consumers particularly attributed this concern to corporations at the advanced stage of behaviour change (action/maintenance). This conscious group of green consumers often highlighted the aspect as inhibiting some of their choices in terms of the category under study but also concerning the overall sustainable consumption practised by them. What is more, the study noted negative sentiments emerging when discussing green alternatives offered by corporations.

> *"This is my understanding: if a corporate manager perceives an opportunity for profit, why not seize it and capitalize on it? Well, that's not a sound corporate assumption, because only if you completely changed all your products and removed the old line (unsustainable), it's basically a tabula rasa. From now on, all my products are super awe****, chapeau bas. But if you introduce one green line, I don't trust it. Sorry, you're just being a crackpot to me and trying to scr*** me over. Not an option, I'm just not going for it"* (Participant 15: Action stage).

> *"When it comes to the corporate aspects, so like probably most people, I'm not too trusting of them and their 'eco' labelling (...), they're just doing the bare minimum required – just what they need to do to get a certificate or some sort of label. Nothing more! So it's probably not exactly for ideological reasons being done, but rather for commercial ones"* (Participant 16: Action stage).

Respondents almost unequivocally (regardless of the SOC) prefer products offered by smaller manufacturers (employing up to 20 people) or local companies over corporate ones. Moreover, they prefer to pay more for locally crafted GPCPs. The rationale behind this usually included the word 'support smaller' in the statements made by respondents. This is what 18 out of 20 of the respondents answered during the study.

> *"I am more convinced by smaller companies, especially if the (green) brand is new, I believe they want to make a name for themselves on the market. They really exemplify their work. And yet, the number of people*

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who work there, has this idea of putting out a good quality product rather than going for quantity. Quality, I hope, plays first fiddle for such a small company" (Participant 11: Action stage).

"I find myself more drawn to these niche green brands, especially small companies and Polish brands, for instance. I also like a product to be Polish, rather than manufactured by a large corporation. I prefer smaller, niche green cosmetics brands. It seems to me that by supporting a smaller entrepreneur, I am somehow helping them more than those who are sure to stay on the market" (Participant 20: Maintenance stage).

One might therefore be tempted to conclude that there is a rather negative attitude towards big manufacturers offering GPCPs alternatives, whereas there is a very positive attitude towards small craft producers.

This observation stands in contrast to the reports from other studies in which general trends have been analysed on the perception of products offered globally. The general perception of global brands has tended to be very positive due to global availability, colourfulness and diversity of offerings, innovation, and success on the international market as evidence of high quality. Research conducted by Davvetas and Diamantopoulos (2016) revealed that consumer preferences for choosing local brands are largely influenced by the specific product category. This highlights the importance of employing category-specific strategies in the management of brands on a global and local scale. Results from the interviews lead to the hypothesis that responses towards local green FMCG brands are much more positive than towards global brand offerings. This goes along with greater acceptance of paying a premium for green products locally manufactured.

The study uncovered an additional barrier that significantly impedes sustainable consumption, namely the presence of ineffective green marketing communication. This barrier exerts a substantial influence, acting as a formidable force against the adoption of sustainable behaviors. This barrier, in turn, is extremely effective in inhibiting purchase intention at the initial three SOC phases (pre-contemplation, contemplation, and preparation).

"There should be some kind of info in the shop, you know, like from the manufacturer or store, letting you know that this product comes in eco-friendly packaging. It could say something like "Make the right choice – protect the planet." (...) Something very striking like that. Then I would think about it, lean towards it" (Participant 13: Pre-contemplation stage).

The study findings highlight the importance of enhancing green marketing communication on green products, particularly among consumers who hold pro-environmental values. Insufficient exposure to such communication underscores the necessity for more robust efforts to effectively convey the green aspects of products (Alsmadi, 2007).

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Functional barriers

Functional barriers pertain to patterns of product usage, their perceived value, and the associated risks related to using specific products (Ram & Sheth, 1989, p. 7). The study identified several functional barriers, which are discussed below.

Usage barrier

The usage barrier is the result of incompatibility between user values, acceptance conditions and previous experience (Talwar et al., 2021). The usage barrier in this study consisted of barriers in the perceived form of lower availability and increased consumption of time to search for products at points of sale.

> *"While at the hairdresser's, she suggests that for my hair, the green shampoo brand X would be the most suitable (..). So you know, occasionally, being at some store, I ask around, and they don't have it. The same thing happens at the second store, and even at the third one. As it turns out, the product is exclusively available in select pharmacies, limiting its accessibility. In such a situation, one would need to order the product online. As a result, time passes, and the topic fades away and is forgotten"* (Participant 6: Contemplation stage).

Value barrier

Value barriers result from a consumer's unfavourable assessment of the difference in the value of new products compared to traditional ones (Laukkanen, 2016). In this study, the value barrier consists of subthemes resulting from perceived worse consistency than in conventional products, lack of immediate effect, worse performance, worse quality, worse smell and comfort of use.

> *"But when it comes to the wooden toothbrush, I am not perfectly satisfied either, because it is very soft. So there is no ideal solution for me. I would love to look for a green one, but one that would give me satisfactory performance"* (Participant 3: Pre-contemplation stage).

The value and usage barrier most actively affects the purchasing behaviour of consumers at the early stages (contemplation, pre-contemplation, preparation), who perceive lower availability, performance or functionality of green alternatives as a significant problem. This is due to the fact that these consumers have not yet taken effective targeted action to purchase GPCPs, and their use is mainly inhibited by the barrier of existing habits. Participants who are at the later stages of change (maintenance, action) do not experience the abovementioned barriers or perceive them as minor impediments that

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do not affect their green purchasing behaviour. These findings are in line with those obtained by Reinhardt et al. (2019), who discovered that non-adopters state performance improvement as significant adoption triggers more often than adopters.

Noticeable consumer self-determination in these latter phases (action, maintenance) of change determines, to a large extent, the trajectory regarding the impact of usage and value barriers. Driven by incentives that appeal to their product expectations (health and environmental advantage), consumers effectively execute their intentions through engaging and informed choices. Such consumer self-determination, as a variable positively influencing the acceptance of innovations, was described by Chung and Liang (2020). The barriers they perceive the most, and which may condition their choices, are most closely related to image perception.

Risk barrier

A risk barrier constitutes the range of risks a consumer associates with using an innovative product (Laukkanen et al., 2007; Ram & Sheth, 1989). In this study, verifying the risk barriers to GPCPs consumption, four sub-themes were identified: financial, lack of self-efficacy in offsetting environmental, related to bad past experiences with this product category, and lack of added value regarding green alternatives over traditional ones.

> *"Green products are often more expensive. Many people certainly pay attention to the price. I pay attention to that too, because everyone has a certain amount of money to spend at any given time or in any given month. So, I look at that price and I try not to buy something if I don't know it (...) because I have a fear that I'm going to get an allergy on my face or whatever. Thus, I prefer something I know and can associate with, for example, something that someone has recommended to me and I have confidence that it will be a good product"* (Participant 8: Preparation stage).

It is natural that consumers with limited budgets remain more cautious in their choices. Price sensitivity often determines the choice and is one of the key factors 'holding back' green purchases (Nguyen et al., 2019). The lack of recommendations, which is crucial in the surveyed category's market, often magnifies the financial risk associated with this decision. According to the majority of the respondents, "recommendation" emerged as a critical factor, perceived as the most potent lever for overcoming all the barriers identified in this study, thereby facilitating the consumption of Green Personal Care Products (GPCPs).

Some consumers, mostly at earlier stages of the change process, do not believe in their self-efficiency when protecting the environment as individu-

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als, as well as advantageous and long-term influence on health as one of the promises of GPCPs.

> *"I buy a 75 ml tube of toothpaste once in a while, so it is a product used in very small quantities. (...) My impression is that my environmental impact by buying this organic product is negligible here. (...) My impression in relation to personal health is that this impact is negligible"* (Participant 14: Pre-contemplation stage).

Individuals demonstrating low self-efficacy in adapting a particular behaviour will be less likely to engage in that situation-specific task (Bandura, 1977). In the pre-contemplation phase, self-efficacy tends to be low, whereas it increases with subsequent SOC phases to be strongest in the maintenance and action phases (Herrick et al., 1997).

Perceived lack of added value and past bad experiences with GPCPs emerged in the interviews as one of the risks consumers want to avoid.

> *"While I may not be well-versed in numerous organic products, I did have an experience with bath salts labeled as 'bio' that claimed to be healthy and made from natural ingredients. However, I didn't perceive any noticeable effects on the water's softness or the sensation on my skin after using them in the bath."* (Participant 9: Pre-contemplation stage).

The aforementioned risk barriers were more strongly articulated by respondents at the early stages of change. Consumers who have minimal experience with the product category, tend to express risk barriers more strongly. This can be attributed to their limited familiarity with green products and their associated risks. As they progress through the stages of change and gain more exposure and knowledge, their perception of risk may evolve and become less pronounced.

Triggers to green consumption

Reinhardt et al. (2019), in a very extensive qualitative study referring to a number of innovations, determined three general categories of triggers that increase the chance of innovation adaptation, namely: increasing the attractiveness of an innovation (regarding performance or price), barrier reduction (acquisition of knowledge and self-restricted use) or changes in the social system.

In this study, several important triggers were also observed in relation to adapting innovations in the form of GPCPs consumption: green word-of-mouth (WoM), parenting, general category involvement, current diet: vegetarianism/veganism, marketing communication, storytelling and openness to experience.

It was observed that respondents, regardless of the SOC towards green consumption, declared great sensitivity to green WoM. Undeniably, such

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a recommendation exerts a substantial influence on green consumer choices, as indicated by respondents' statements, and possesses the potential to effectively mitigate all the analysed barriers. This is in line with other studies (Mouloudj & Bouarar, 2021).

Parenting is another revealed factor having the potential to positively stimulate this particular green product consumption. In previous research, it has been indicated that the relationship between parenthood and green consumption shows a rather inverse correlation. According to Migheli (2021), parenting negatively affects green consumption in general. In the case of the category under study, however, this relationship may be reversed due to aspects of increased health safety concerning green personal care product alternatives for children.

The level of general involvement in the personal care products category, as well as dietary choices such as vegetarianism or veganism, were observed to be factors influencing consumers' attitudes and intentions to purchase green alternatives. These findings suggest that these factors play a role in shaping consumer preferences for environmentally friendly options. This phenomenon can occur due to higher awareness and knowledge among individuals who are more involved in the personal care products category. Additionally, dietary choices like vegetarianism or veganism reflect a broader commitment to sustainability, leading to more positive attitudes and intentions towards purchasing green alternatives. Further research is needed to explore these factors in depth. Several respondents stressed that information about green products comes to them as a result of marketing activity by manufacturers. It should be noted, however, that in the research, isolated cases of people were registered at the initial stages of change who incidentally chose green products encouraged by green storytelling on packaging. For consumers, facts and evidence are hugely important in breaking down barriers, but stories are often more easily remembered because of their power to fascinate. Empirical evidence (Lundqvist et al., 2013) points to the enormous impact of well-designed marketing stories.

Discussion

In the literature on green consumption, much consideration has been focused on the study of psychological and social factors affecting green consumption. The integration of IRT and SOC brings new knowledge about consumer attitudes and behaviours at different stages of adaptation towards green products. Proper qualification of consumers according to their position on the "wheel of change" towards green consumption will allow more efficient and effective implementation of sustainable strategies as resistance

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reduces the effectiveness of sustainability interventions and generates consequences for policymakers, companies and consumers (Gonzalez-Arcos et al., 2021).

In Figure 2, the synthesised results of our study are presented. This leads to a discussion about results for other researchers. First and foremost, it is crucial to highlight that the integration of Stages of Change (SOC) and Innovation Resistance Theory (IRT) concepts introduces a novel perspective on the architecture of barriers. While analysing the results of the research, ones may notice that the general conclusion refers to the functional barriers within the IRT construct that disappear at the last two stages of change. Psychological barriers, on the other hand, remain but assume a different form, mainly related to a higher level of awareness. At the initial stages (pre-contemplation, contemplation), the image barrier mainly accumulates around general scepticism about green product alternatives and the lack of convincing marketing incentives to stimulate change. Thus, unaware consumers do not feel the need to modify their behaviour. Habitual resistance and limited knowledge about green product alternatives and their potential positive influence on the environment as well as personal health generate high perceived risks related to the transformation.

Some types of psychological barriers, such as tradition, are noticeable at the first stages of the change process, while during stages of action and maintenance, they are not observed in the same vein. Tradition serves as a psychological barrier that emerges from the clash with customers' preexisting beliefs (Ram & Sheth, 1989). In their research, Ram and Sheth (1989) and Amberg and Fogarassy (2019) also identified that dimension. It is not clear whether this is tradition or routine due to the fact that tradition is strongly connected with emotions and celebrating moments, while routine is not based on that type of self-reflection. In our research, respondents mentioned habits and sentiment, suggesting both possible sources of inhibitors and interpretations. This further indicates that the barrier may be perceived as a routine, and – to change attitude – customers have to break repeated patterns of behaviour (Herbig & Day, 1992).

Image is shaped by customers' knowledge and experience with a particular subject or object influenced by the connotations that external target groups associate with specific companies and brands (Burmann et al., 2008). This suggests consumer acceptance of innovative GPCPs (knowledge and emotions) is influenced directly (through own experience) or indirectly (from WOM or media). The weak positioning in consumers' minds, accompanied by their scepticism without support from communication, is an inhibitor during the three stages from pre-contemplation to preparation. In advanced stages of change, the image barrier evolves and intensifies, particularly regarding the lack of trust in corporate green product manufacturers,

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their perceived lack of transparency, and their real contribution to sustainable production. Consumer suspicion increases with greater knowledge and experience. Hence, there is a need to develop communication strategies targeting this group of consumers based on alternative arguments. Examples of such arguments include providing evidence of environmentally friendly actions, transparency regarding product composition, and the credibility of certifications and independent evaluations.

Therefore, the image barrier is multi-faceted, variable for almost every stage of change towards green consumption, and requires separate consideration depending on the consumer's progress. Identifying and describing these facets requires additional effort from the scientific community and poses an intriguing challenge for future research.

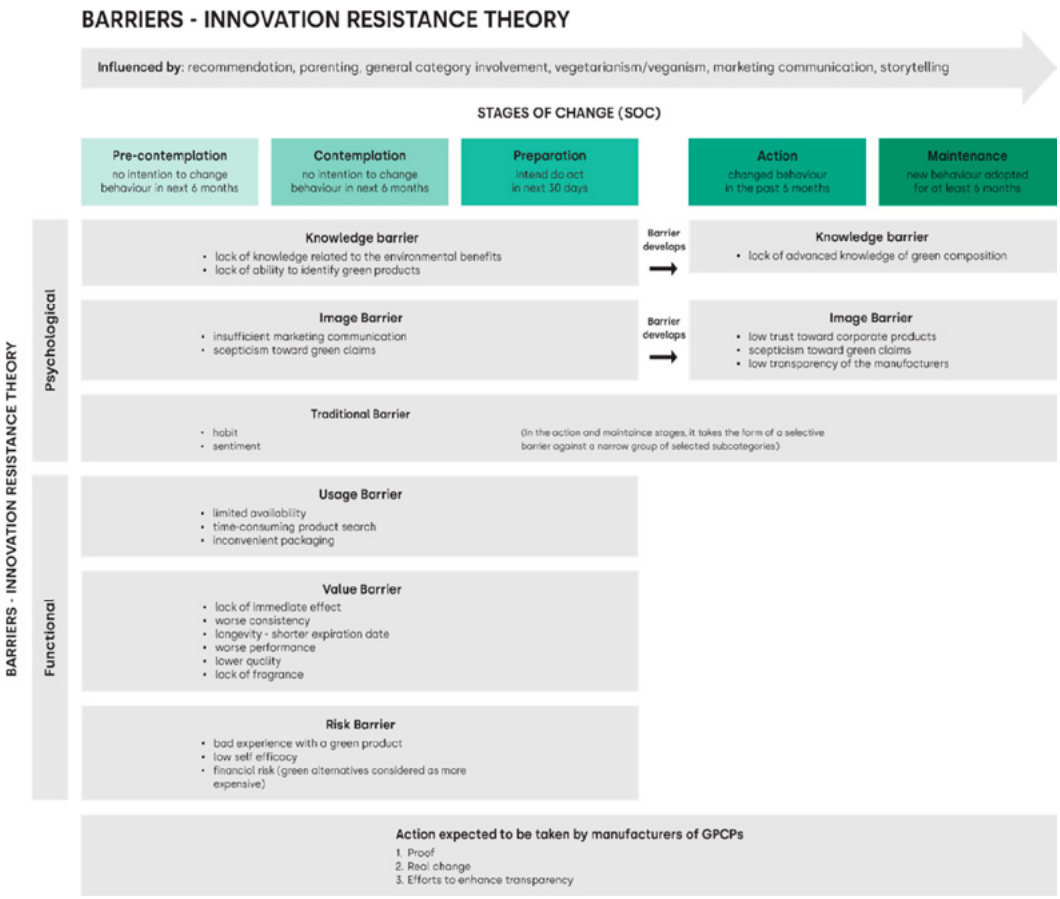

Figure 3. Barrier that exist at each stage of change towards GPCPs consumption. The figure includes environmental stimulants and action expected to be undertaken by manufacturers

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Functional values, such as value barriers, strongly refer to benefits delivered by GPCPs. According to Chen and Deng (2016), environmental awareness as well as price sensitivity are intertwined and have a significant impact on the level of green purchases. Among other types of values described by consumers is trust in green cosmetics' effectiveness. In their research, Amberg and Fogarassy (2019) noticed that consumers will not use natural cosmetics if they are not as effective as their chemical complements. However, the quality of GPCPs is perceived as a barrier that can be weakened by price due to there being a correlation assumed between product price and quality (Wang et al., 2019).

The knowledge barrier is significantly evolving throughout SOC phases. Being aware can be defined as a process of change that progresses as knowledge increases through information and learning (Fiske, 2008). Naturally, environmental knowledge increases as the awareness increases (Safari et al., 2020) and vice versa. Some researchers use knowledge and awareness interchangeably in certain contexts (Kwatra et al., 2014). Knowledge is a moderator of the relationship found between practices of green innovation and consumer resistance to such innovation (Khan et al., 2022). According to Kao and Du (2020), providing information with high-quality features in advertising messages influences consumers' positive perception of a green brand. Based on that research, we argue that information should include a real reliable proof. Creating effective green marketing messages for first SOC segments may therefore require a completely different strategic approach focused on education and providing quality evidence of product sustainability (e.g., comparative advertising, content backed by factual sources, and expert support). Marketing is seen as the basic channel in promoting green consumption, but selective marketing is suggested to increase the share of the population subscribing to green consumption (Nelson et al., 2009). The selection of appropriate marketing triggers should reflect the specifics of these consumers from initial phases, inexperienced with change, clinging to their habits, but also not open to dynamic and categorical change. It is also very important at this stage to stimulate social change towards green consumption. Social influence at these early stages has the potential for the strongest stimulation of the green consumption effects. "Motived by a warm glow, which can be understood as a good feeling after engaging in a pro-social behaviour" (Tezer & Bodur, 2019) is a social creation that could prove effective in stimulating change through appropriate marketing efforts. Thus, a huge role in social marketing remains to be played in properly promoting green consumption to this audience.

Consumers who are in the third SOC group (pre-contemplation) can be described as 'lost' and in need of a 'helping hand' type of intervention. These individuals are already entirely open to change, trying to implement green

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habits but get 'lost' in the process. Green marketing communications could be primarily focused on creating 'traffic signs' and 'green signalisation to help identify both the environmental and health benefits for the consumer in the pre-contemplation phase, as well as generate cues to aid in identity establishment of green products.

Finally, at the final SOC stage (maintenance, action), corporations take on a huge role. These precisely targeted and aware of consumer trust smaller manufacturers of green alternatives are incredibly sensitive to the issue of transparency as well as product composition. This consumer greatly appreciates sustainable packaging but is equally sensitive to the aesthetic issues of green packaging. GPCPs designed for conscious consumers should be based on a simplified natural and fresh aesthetic. The consumer also has noticeably higher expectations in terms of packaging innovation (e.g., reusable refill options). This segment expects to be taken seriously, as for it, GPCPs are often a category in which the consumer is very committed to buying. Therefore, in their actions, global companies should convince buyers that they have made a real, sustainable change at all stages of production. Genuine change should also be visible on the packaging by offering GPCPs, the composition and packaging of which ought to be both consistent with the idea of green change and appealing to the consumers' high expectations.

What should be strongly emphasised are certain consumer expectations directed at green product manufacturers, namely: the expectation of eco-performance proof, a real change towards 360-degree green manufacturing, and a definite increase in transparency efforts. All respondents, regardless of the SOC, declared openness to change and increased efforts to be more committed to environmental protection. However, they were not fully convinced by market agents. They were not even provided with evidence in the form of articulating the prevalence of green alternatives for health and the environment. Consumers expect a real change in the behaviour of manufacturers, including transforming the entire production process toward those sustainable and offering exclusively green innovations, completely abandoning traditional ones. Only such action has the potential to definitely increase credibility, but also positively affect transparency. Sustainability might be a significant purchase criterion if and only if consumers feel they have been convinced by authentic, mission-driven green companies.

Theoretical implications

The integration of the two concepts: IRT and SOC, brings about new ideas for consumers attitudes toward green personal care products and participation in the process of both inhibitors and stimulants that lead consumers from the stage of pre-contemplation to maintenance. Firstly, as far as psycho-

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logical and functional barriers are concerned, they take part in the SOC process until preparation. At the action and maintenance stages, some inhibitors are still present; however, functional barriers disappear.

The interviews revealed several variables demonstrating potential in moderating relationships between barriers and intention to purchase GPCPs, namely general category involvement, parenting, current diet: vegetarianism/veganism, and openness to experience. The study also revealed that consumers prioritize the health aspect over the environmental aspect when considering alternatives to GPCPs.

In the marketing literature, there is a constant search for answers to the question of how to make a shift in consumer behaviour toward that more sustainable (Kemper & Ballantine, 2019). Knowledge of the perceived barriers in the consumption of green products is of rising significance, as trade organisations are placing more and more emphasis on environmental concerns when assessing performance in line with the triple-bottom line method.

Particularly important for proposing fruitful marketing of innovation dissemination and product failure reduction (Ram, 1987) is the analysis of barriers accompanying individuals at the early stages of change: non-adopters with no intention to change. Stimulation toward sustainable consumption, however, should run parallel throughout the behavioural change process since, at each stage of change, there is a risk that relapse will occur, a phenomenon already known in psychology (Segan et al., 2006). The creators of the TTM model pointed out that the process of change is cyclical rather than linear for most people and that relapse triggers a renewed passage through earlier and later stages of change (Prochaska et al., 1992).

In this study, it has been revealed that the dominant barrier for any consumer (regardless of the stage of change) is a lack of knowledge about green alternatives. However, the intentional acquisition of this knowledge requires certain skills and commitment. Gleim et al. (2013) reported a lack of expertise as being a barrier to green consumption, as well as that the change in the number and form of product information cues can break these barriers. The standardisation and popularisation of knowledge about the certificate marks would have the potential to significantly reduce the dilemmas that consumers currently face on the 'thorny' road towards sustainable consumption. Certification systems provide guarantees of „green quality" by verifying the production process, composition and sourcing of ingredients, packaging, storage, the authenticity of labels, energy and waste management (Vila Franca & Ueno, 2020). Certificates provide evidence of sustainability – a need that remains unmet and generates strong barriers in the transition to green purchasing decisions. Above all, however, certification in the personal care market must be the subject of intense debate and promotion, just as in the food market.

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Nonetheless, a lack of systemic governmental support and that of policymakers inhibits these changes and stifles the evolution of green consumerism. While great hopes are being pinned on green consumerism as the path to a green, low-carbon economy and poverty alleviation leading to an increase in resource efficiency (*Goal 12: Ensure sustainable consumption and production patterns*, 2015) , there are still no concrete regulations or government definitions for GPCPs in the European Union, United States or Brazil (Vila Franca & Ueno, 2020).

Managerial implications

The intention-behavioural gap on the part of manufacturers is the strongest inhibitor of green consumption concerning this product category. By offering genuinely green alternatives, implementing innovations related to greener packaging, and promoting knowledge as well as evidence of how green offerings differ from conventional ones, manufacturers are among the strongest market agents with the potential to reduce inconsistency between consumer declarations and their purchasing behaviour at every stage of change towards green consumption. Lack of quality knowledge and evidence, consumer uncertainty and mistrust stunt green consumption – especially among those at lower stages of change (pre-contemplation, contemplation), who are often characterised by lower overall engagement in the personal care category. This, in turn, reinforces the barrier of tradition, that is, attachment to tried-and-true purchases. This conclusion is in line with that obtained in the research by Sadiq et al. (2021), according to which consumers with deep environmental and health concerns are more expected to use eco-friendly cosmetics, irrespective of existing barriers.

The respondent's level of knowledge about how the consumption of GPCPs alternatives can affect environmental protection was limited at all levels of change. The aspect of green packaging innovation and aesthetics appeared in almost every conversation at the higher stages of change levels, but mainly the intention to purchase GPCPs was shaped by the natural composition of the products and their beneficial effects on personal health. Thus, health consciousness proved to be a much stronger stimulant for more sustainable choices within the given context. What should be strongly emphasised are certain consumer expectations directed at green product manufacturers, namely: the expectation of evidence, real change and a definite increase in transparency efforts. All respondents, regardless of the stage of change, declared openness to change and increased efforts to be more committed with environmental protection. However, they were mostly not convinced by market agents. They were not provided with evidence in the form of even articulating the prevalence of green alternatives for health and the

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environment. Consumers expect a real change in the behaviour of manufacturers, including transforming the entire production line towards sustainable processes and offering exclusively green products, not a mixed variety. Only such transformation has the potential to increase credibility, but will also affect perceived transparency. Sustainability might be a significant purchase criterion if and only if consumers feel they have been convinced by authentic mission-driven green companies.

Conclusions

In this study, preliminary evidence is provided, stating that there is considerable stage-specificity across multiple green consumption behaviours. Sustainable consumer purchasing behaviour generates strong incentives to stimulate manufacturers to make a change towards sustainable industrial development (Liu et al., 2012), which, in turn, benefits environmental well-being. Companies around the world are facing the need to provide improvements in the environmental performance of offered products, often forced by other parties such as the government, customers, suppliers, consumer groups, environmental organisations and even banks together with insurance companies (Klostermann & Tukker, 1998). In order to cover sustainability demands and enhance eco-efficiency, manufacturers are implementing product innovations and offering new alternatives to conventional green solutions for customers. Green consumption patterns are also strengthened by social change, defined by sociologists as a type of social innovation. Social innovation is perceived as a "novel solution to social issues, being more effective, efficient and sustainable compared to already existing solutions, and for which the created value primarily accrues to society as a whole rather than only to private individuals" (Phills et al., 2008, p. 38).

Researchers often portray the lack of intention execution as an unthinking behaviour (Jacobs et al., 2018), but the one-on-one interviews conducted as part of this research allow to suggest that consumers of personal care products are often very thorough in their analysis of green offerings and make their final choices in a very rational and thoughtful manner. The fundamental problem is not a lack of consistency between intention and purchasing behaviour on the part of the consumer. Often, the key problem is a lack of proper attitude and behaviour among manufacturers in terms of green declarations, not translating into the final product offered to consumers. This, in turn, generates a series of image barriers that strongly influence final purchasing behaviours. In particular, the strongly functioning image barrier at all stages of change suggests that the process of change towards green consumption is strongly hampered by the actions of green-washing manufactur-

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ers, generating bad consumer experiences, but also by intuitive consumer mistrust in corporations and their intentions. Thus, there is a noticeable green ethnocentrism in GPCPs consumption which remains consistent with other studies. Hsu et al. (2017) proved that the country of origin moderates links between purchase intention and antecedences in the case of students from Taiwan. The origin of green alternatives can therefore be one of the leading factors in decision-making and product evaluation, as opposed to conventional products. Thus, in addition to cultural differences, immeasurably shaping purchasing behaviour around the world, in analyses, it is important to distinguish the impact of ethnocentrism with regard to the product's nature (green vs. conventional). The future of the ecosystem largely depends on the proper and rapid diffusion of sustainable product and service innovations (Dearing, 2000). Approaches to formulating attitude change strategies, and addressing these societal challenges, require appropriately targeted interventions considering the knowledge of the boundary conditions for the intervention (Gwozdz et al., 2020; Verplanken & Orbell, 2022). There have been a great number of emerging studies in which the effectiveness of stage-specific interventions has been demonstrated within the context of different behaviours, i.e. physical activity or healthy eating (Klöckner & Ofstad, 2017; Teng et al., 2021). Stage-targeted interventions are especially useful in addressing lifestyle modification (Md Yusop et al., 2018).

Limitations and further research

While this study makes a significant contribution to sustainable marketing, the design of this study has its limitations. Generalising the survey to other markets outside of Poland can be problematic when market specifics are considered (both in terms of marketing communications and GPCPs labelling), in particular, the different socioeconomic characteristics of the population and the green consumer consciousness more broadly built place. The sample selected for this study includes residents of one province in one country. In future research, potential similarities among other cultures and nations could be explored.

Despite the aforementioned limitations, this study improves knowledge on the inhibitors and stimulants of the overall green consumption process, thereby, it will help programming interventions more effectively, for both social and commercial green marketing strategies.

In further research, quantitative verification should be carried out with regard to the impact of individual barriers at each stage of change, optimally compared to several categories of green products in different cultural contexts in order to compare possible differences.

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More attention should be paid to the knowledge barrier and its different framings related to green consumption. Also, attitudes toward acquiring green knowledge could be examined. And when it is acquired, does having green knowledge equate to and ability to use it?

Consumers may also hide behind the knowledge barrier, and in fact, the actual barrier may be a negative attitude towards acquiring knowledge or unsatisfactory quality of the information provided. These aspects should be explored in the future through further research.

The contribution of the authors

Marta Szaban was responsible for reviewing the literature, designing the study, conducting the research, coding the results, and analysing and interpreting the data.

Magdalena Stefańska acted as supervisor throughout the research process and participated in the writing of the article (formulation of conclusions and discussion).

Authors have no conflict of interest.

Data availability

The datasets generated and analysed during the current study are available from the corresponding author on reasonable request.

References

Ahn, Y., & Kim, K. W. (2012). Beliefs Regarding Vegetable Consumption, Self-Efficacy and Eating Behaviors according to the Stages of Change in Vegetable Consumption among College Students. KJCN, 17(1), 1-13. https://doi.org/10.5720/kjcn.2012.17.1.1

Alsmadi, S. (2007). Green Marketing and the Concern over the Environment: Measuring Environmental Consciousness of Jordanian Consumers. Journal of Promotion Management, 13(3-4), 339-361. https://doi.org/10.1080/10496490802306905

Amberg, N., & Fogarassy, C. (2019). Green Consumer Behavior in the Cosmetics Market. Resources, 8(3), 137. https://www.mdpi.com/2079-9276/8/3/137

Antioco, M., & Kleijnen, M. (2010). Consumer adoption of technological innovations Effects of psychological and functional barriers in a lack of content versus a presence of content situation. European Journal of Marketing, 44(11-12), 1700-1724. https://doi.org/10.1108/03090561011079846

Arnaudova, M., Brunner, T. A., & Götze, F. (2022). Examination of students' willingness to change behaviour regarding meat consumption. Meat Science, 184, 108695. https://doi.org/10.1016/j.meatsci.2021.108695

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. Psychological review, 84(2), 191-215. https://doi.org/10.1037/0033-295X.84.2.191

Bänsch, A. (1990). Marketingfolgerungen aus Gründen für den Nichtkauf umweltfreundlicher Konsumgüter. Jahrbuch der Absatz-und Verbrauchsforschung, 4, 360-379.

DOI: 10.34659/eis.2023.85.2.570

Bell, E., Bryman, A., & Harley, B. (2022). *Business research methods. Sixth Edition.* Oxford UniversityPress.

Botonaki, A., Polymeros, K., Tsakiridou, E., & Mattas, K. (2006). The role of food quality certification on consumers' food choices. British Food Journal, 108(2), 77-90. https://doi.org/10.1108/00070700610644906

Bridle, C., Riemsma, R. P., Pattenden, J., Sowden, A. J., Mather, L., Watt, I. S., & Walker, A. (2005). Systematic review of the effectiveness of health behavior interventions based on the transtheoretical model. Psychology & Health, 20(3), 283-301. https://doi.org/10.1080/08870440512331333997

Bryła, P. (2016). Organic food consumption in Poland: Motives and barriers. Appetite, 105, 737-746. https://doi.org/10.1016/j.appet.2016.07.012

Bryła, P. (2018). Organic food online shopping in Poland. British Food Journal, 120(5), 1015-1027. https://doi.org/10.1108/BFJ-09-2017-0517

Buder, F., Feldmann, C., & Hamm, U. (2014). Why regular buyers of organic food still buy many conventional products: product-specific purchase barriers for organic food consumers. British Food Journal, 116(3), 390-404. https://doi.org/10.1108/BFJ-04-2012-0087

Burmann, C., Schaefer, K., & Maloney, P. (2008). Industry image: Its impact on the brand image of potential employees. Journal of Brand Management, 15(3), 157-176. https://doi.org/10.1057/palgrave.bm.2550112

Cervellon, M.-C., & Carey, L. (2020). Consumers' Perceptions of 'Green'. In M. Barnard (Ed.), *Fashion Theory* (pp. 161-176). Routledge. https://doi.org/10.4324/9781315099620-19

Chen, K., & Deng, T. (2016). Research on the Green Purchase Intentions from the Perspective of Product Knowledge. Sustainability, 8(9), 943. https://www.mdpi.com/2071-1050/8/9/943

Chung, K. C., & Liang, S. W.-J. (2020). Understanding Factors Affecting Innovation Resistance of Mobile Payments in Taiwan: An Integrative Perspective. Mathematics, 8(10), 1841. https://www.mdpi.com/2227-7390/8/10/1841

Chwialkowska, A., & Flicinska-Turkiewicz, J. (2021). Overcoming perceived sacrifice as a barrier to the adoption of green non-purchase behaviours. International Journal of Consumer Studies, 45(2), 205-220. https://doi.org/10.1111/ijcs.12615

Connell, K. Y. H. (2010). Internal and external barriers to eco-conscious apparel acquisition. International Journal of Consumer Studies, 34(3), 279-286. https://doi.org/10.1111/j.1470-6431.2010.00865.x

Cornescu, V., & Adam, C.-R. (2013). The Consumer Resistance Behavior towards Innovation. Procedia Economics and Finance, 6, 457-465. https://doi.org/10.1016/S2212-5671(13)00163-9

Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. SAGE Publications.

Cunha, D. B., de Souza Bda, S., da Veiga, G. V., Pereira, R. A., & Sichieri, R. (2015). Readiness for behavioral change and variation in food consumption among adolescents from a school-based community trial in Duque de Caxias, RJ. Revista Brasileira de Epidemiologia, 18(3), 655-665. https://doi.org/10.1590/1980-5497201500030011

Damaskinidis, G. (2017). Qualitative Research and Subjective Impressions in Educational Contexts. American Journal of Educational Research, 5(12), 1228-1233. http://pubs.sciepub.com/education/5/12/10

DOI: 10.34659/eis.2023.85.2.570

D'Attoma, I., & Ieva, M. (2020). Determinants of technological innovation success and failure: Does marketing innovation matter? Industrial Marketing Management, 91, 64-81.

Davvetas, V., & Diamantopoulos, A. (2016). How Product Category Shapes Preferences toward Global and Local Brands: A Schema Theory Perspective. Journal of International Marketing, 24(4), 61-81. https://doi.org/10.1509/jim.15.0110

Dearing, A. (2000). Sustainable innovation: Drivers and barriers. Innovation and the Environment, 103-125.

Diepenmaat, H., Kemp, R., & Velter, M. (2020). Why Sustainable Development Requires Societal Innovation and Cannot Be Achieved without This. Sustainability, 12(3), 1270. https://www.mdpi.com/2071-1050/12/3/1270

ElHaffar, G., Durif, F., & Dube, L. (2020). Towards closing the attitude-intention-behavior gap in green consumption: A narrative review of the literature and an overview of future research directions. Journal of Cleaner Production, 275, 122556. https://doi.org/10.1016/j.jclepro.2020.122556

Eze, U. C., & Ndubisi, N. O. (2013). Green Buyer Behavior: Evidence from Asia Consumers. Journal of Asian and African Studies, 48(4), 413-426. https://doi.org/10.1177/0021909613493602

Fiske, S. T., & Taylor, S. (2008). *Social Cognition: From Brains to Culture*. Boston: McGraw-Hill Higher Education.

Forward, S. E. (2014). Exploring people's willingness to bike using a combination of the theory of planned behavioural and the transtheoretical model. European Review of Applied Psychology, 64(3), 151-159. https://doi.org/10.1016/j.erap.2014.04.002

Fudge, S., & Peters, M. (2011). Behaviour Change in the UK Climate Debate: An Assessment of Responsibility, Agency and Political Dimensions. Sustainability, 3(6), 789-808. https://www.mdpi.com/2071-1050/3/6/789

Fujii, Y., Harada, K. H., & Koizumi, A. (2013). Occurrence of perfluorinated carboxylic acids (PFCAs) in personal care products and compounding agents. Chemosphere, 93(3), 538-544. https://doi.org/10.1016/j.chemosphere.2013.06.049

Gatersleben, B., & Appleton, K. M. (2007). Contemplating cycling to work: Attitudes and perceptions in different stages of change. Transportation Research Part A: Policy and Practice, 41(4), 302-312. https://doi.org/10.1016/j.tra.2006.09.002

Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research.* New Brunswick: Aldine Transaction. http://www.sxf.uevora.pt/wp-content/uploads/2013/03/Glaser_1967.pdf

Gleim, M. R., Smith, J. S., Andrews, D., & Cronin, J. J. (2013). Against the Green: A Multi-method Examination of the Barriers to Green Consumption. Journal of Retailing, 89(1), 44-61. https://doi.org/10.1016/j.jretai.2012.10.001

Gonzalez-Arcos, C., Joubert, A. M., Scaraboto, D., Guesalaga, R., & Sandberg, J. (2021). "How Do I Carry All This Now?" Understanding Consumer Resistance to Sustainability Interventions. Journal of Marketing, 85(3), 44-61. https://doi.org/10.1177/0022242921992052

Goyal, N., & Jerold, F. (2021). Biocosmetics: technological advances and future outlook. Environmental Science and Pollution Research, 30, 25148-25169. https://doi.org/10.1007/s11356-021-17567-3

Gwozdz, W., Reisch, L. A., & Thøgersen, J. (2020). Behaviour Change for Sustainable Consumption. Journal of Consumer Policy, 43(2), 249-253. https://doi.org/10.1007/s10603-020-09455-z

DOI: 10.34659/eis.2023.85.2.570

Herbig, P. A., & Day, R. L. (1992). Customer Acceptance: The Key to Successful Introductions of Innovations. Marketing Intelligence & Planning, 10(1), 4-15. https://doi.org/10.1108/02634509210007812

Herrick, A. B., Stone, W. J., & Mettler, M. M. (1997). Stages of change, decisional balance, and self-efficacy across four health behaviors in a worksite environment. Am J Health Promot, 12(1), 49-56. https://doi.org/10.4278/0890-1171-12.1.49

Hsu, C. L., Chang, C. Y., & Yansritakul, C. (2017). Exploring purchase intention of green skincare products using the theory of planned behavior: Testing the moderating effects of country of origin and price sensitivity. Journal of Retailing and Consumer Services, 34, 145-152. https://doi.org/10.1016/j.jretconser.2016.10.006

Jacob, S. L., Cornell, E., Kwa, M., Funk, W. E., & Xu, S. (2018). Cosmetics and Cancer: Adverse Event Reports Submitted to the Food and Drug Administration. JNCI Cancer Spectr, 2(2), pky012. https://doi.org/10.1093/jncics/pky012

Jacobs, K., Petersen, L., Hörisch, J., & Battenfeld, D. (2018). Green thinking but thoughtless buying? An empirical extension of the value-attitude-behaviour hierarchy in sustainable clothing. Journal of Cleaner Production, 203, 1155-1169. https://doi.org/10.1016/j.jclepro.2018.07.320

Jaeger-Erben, M., Rückert-John, J., & Schäfer, M. (2015). Sustainable consumption through social innovation: a typology of innovations for sustainable consumption practices. Journal of Cleaner Production, 108, 784-798. https://doi.org/10.1016/j.jclepro.2015.07.042

Joshi, Y., & Rahman, Z. (2015). Factors Affecting Green Purchase Behaviour and Future Research Directions. International Strategic Management Review, 3(1), 128-143. https://doi.org/10.1016/j.ism.2015.04.001

Kao, T.-F., & Du, Y.-Z. (2020). A study on the influence of green advertising design and environmental emotion on advertising effect. Journal of Cleaner Production, 242, 118294. https://doi.org/10.1016/j.jclepro.2019.118294

Kaur, P., Dhir, A., Ray, A., Bala, P. K., & Khalil, A. (2021). Innovation resistance theory perspective on the use of food delivery applications. Journal of Enterprise Information Management, 34(6), 1746-1768. https://doi.org/10.1108/JEIM-03-2020-0091

Keller, K. L., & Staelin, R. (1987). Effects of Quality and Quantity of Information on Decision Effectiveness. Journal of Consumer Research, 14(2), 200-213. https://doi.org/10.1086/209106

Kemper, J. A., & Ballantine, P. W. (2019). What do we mean by sustainability marketing? Journal of Marketing Management, 35(3-4), 277-309. https://doi.org/10.1080/0267257X.2019.1573845

Khan, M. A. S., Du, J., Malik, H. A., Anuar, M. M., Pradana, M., & Yaacob, M. R. B. (2022). Green innovation practices and consumer resistance to green innovation products: Moderating role of environmental knowledge and pro-environmental behavior. Journal of Innovation & Knowledge, 7(4), 100280. https://doi.org/10.1016/j.jik.2022.100280

Klaschka, U. (2016). Are natural compounds used in personal care products toxic for the aquatic environment? Sustainable Chemistry and Pharmacy, 4, 13-20. https://doi.org/10.1016/j.scp.2016.07.002

Klöckner, C. A., & Ofstad, S. P. (2017). Tailored information helps people progress towards reducing their beef consumption. Journal of Environmental Psychology, 50, 24-36. https://doi.org/10.1016/j.jenvp.2017.01.006

Klostermann, J. E., & Tukker, A. (1998). *Product innovation and eco-efficiency: twenty-three industry efforts to reach the Factor 4.* Boston: Kluwer Academic Publishers.

DOI: 10.34659/eis.2023.85.2.570

Koniecki, D., Wang, R., Moody, R. P., & Zhu, J. (2011). Phthalates in cosmetic and personal care products: concentrations and possible dermal exposure. Environ Res, 111(3), 329-336. https://doi.org/10.1016/j.envres.2011.01.013

Kuisma, T., Laukkanen, T., & Hiltunen, M. (2007). 'Mapping the Reasons for Resistance to Internet Banking: A Means-End Approach'. International Journal of Information Management, 27, 75-85. https://doi.org/10.1016/j.ijinfomgt.2006.08.006

Kumar, P., Polonsky, M., Dwivedi, Y. K., & Kar, A. (2021). Green information quality and green brand evaluation: the moderating effects of eco-label credibility and consumer knowledge. European Journal of Marketing, 55(7), 2037-2071. https://doi.org/10.1108/EJM-10-2019-0808

Kushwah, S., Dhir, A., Sagar, M., & Gupta, B. (2019). Determinants of organic food consumption. A systematic literature review on motives and barriers. Appetite, 143, 104402. https://doi.org/10.1016/j.appet.2019.104402

Kwatra, S., Pandey, S., & Sharma, S. (2014). Understanding public knowledge and awareness on e-waste in an urban setting in India. Management of Environmental Quality: An International Journal, 25(6), 752-765. https://doi.org/10.1108/MEQ-12-2013-0139

Lacey, S. J., & Street, T. D. (2017). Measuring healthy behaviours using the stages of change model: an investigation into the physical activity and nutrition behaviours of Australian miners. Biopsychosocial Medicine, 11, 30. https://doi.org/10.1186/s13030-017-0115-7

Laukkanen, T. (2016). Consumer adoption versus rejection decisions in seemingly similar service innovations: The case of the Internet and mobile banking. Journal of Business Research, 69(7), 2432-2439. https://doi.org/10.1016/j.jbusres.2016.01.013

Laukkanen, T., Sinkkonen, S., Kivijärvi, M., & Laukkanen, P. (2007). Innovation resistance among mature consumers. Journal of Consumer Marketing, 24(7), 419-427. https://doi.org/10.1108/07363760710834834

Lin, Y., Yang, S., Hanifah, H., & Iqbal, Q. (2018). An Exploratory Study of Consumer Attitudes toward Green Cosmetics in the UK Market. Administrative Sciences, 8(4), 71. https://www.mdpi.com/2076-3387/8/4/71

Liobikienė, G., & Bernatonienė, 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

Liu, X., Wang, C., Shishime, T., & Fujitsuka, T. (2012). Sustainable consumption: Green purchasing behaviours of urban residents in China. Sustainable Development, 20(4), 293-308. https://doi.org/10.1002/sd.484

Lundqvist, A., Liljander, V., Gummerus, J., & van Riel, A. (2013). The impact of storytelling on the consumer brand experience: The case of a firm-originated story. Journal of Brand Management, 20, 283-297. https://doi.org/10.1057/bm.2012.15

Ma, L., & Lee, C. S. (2019). Understanding the Barriers to the Use of MOOCs in a Developing Country: An Innovation Resistance Perspective. Journal of Educational Computing Research, 57(3), 571-590. https://doi.org/10.1177/0735633118757732

Mani, Z., & Chouk, I. (2018). Consumer Resistance to Innovation in Services: Challenges and Barriers in the Internet of Things Era. Journal of Product Innovation Management, 35(5), 780-807. https://doi.org/10.1111/jpim.12463

McDonald, S., Oates, C., Thyne, M., Alevizou, P., & McMorland, L. A. (2009). Comparing sustainable consumption patterns across product sectors. International Journal

ofConsumerStudies,33(2),137-145.https://doi.org/10.1111/j.1470-6431.2009.00755.x

Md Yusop, N. B., Mohd Shariff, Z., Hwu, T. T., Abd Talib, R., & Spurrier, N. (2018). The effectiveness of a stage-based lifestyle modification intervention for obese children. BMC Public Health, 18(1), 299. https://doi.org/10.1186/s12889-018-5206-2

Melander, L. (2017). Achieving Sustainable Development by Collaborating in Green Product Innovation. Business Strategy and the Environment, 26(8), 1095-1109. https://doi.org/10.1002/bse.1970

Migheli, M. (2021). Green purchasing: the effect of parenthood and gender. Environment, Development and Sustainability, 23(7), 10576-10600. https://doi.org/10.1007/s10668-020-01073-6

Moloney, S., & Strengers, Y. (2014). 'Going Green'?: The Limitations of Behaviour Change Programmes as a Policy Response to Escalating Resource Consumption. Environmental Policy and Governance, 24(2), 94-107. https://doi.org/10.1002/eet.1642

Moscato, E. M., & Machin, J. E. (2018). Mother natural: Motivations and associations for consuming natural foods. Appetite, 121, 18-28. https://doi.org/10.1016/j.appet.2017.10.031

Mouloudj, K., & Bouarar, A. C. (2021). The Impact of Word of Mouth on Intention to Purchase Green Products: An Empirical Study. Revue Algérienne d'Economie et gestion, 15(1), 871-890.

Nelson, B., Taylor, D., & Strick, S. (2009). Wine consumers' environmental knowledge and attitudes: Influence on willingness to purchase. International Journal of Wine Research, 1, 59-72. https://doi.org/10.2147/IJWR.S4649

Nguyen, H. V., Nguyen, C. H., & Hoang, T. T. B. (2019). Green consumption: Closing the intention-behavior gap. Sustainable Development, 27(1), 118-129. https://doi.org/10.1002/sd.1875

Niedermeier, A., Emberger-Klein, A., & Menrad, K. (2021a). Drivers and barriers for purchasing green Fast-Moving Consumer Goods: A study of consumer preferences of glue sticks in Germany. Journal of Cleaner Production, 284, 124804. https://doi.org/10.1016/j.jclepro.2020.124804

Niedermeier, A., Emberger-Klein, A., & Menrad, K. (2021b). Which factors distinguish the different consumer segments of green fast-moving consumer goods in Germany? Business Strategy and the Environment, 30(4), 1823-1838. https://doi.org/10.1002/bse.2718

Olejnik, I., & Stefańska, M. (2022). Dobór próby i analiza wyników w badaniach jakościowych. In M. Rószkiewicz, K. Mazurek – Łopacińska & A. Sagan (Eds.), *Dobór próby we współczesnych badaniach marketingowych. Podejścia ilościowe, jakościowe i mieszane* (pp. 59-74). Szczecin: Wydawnictwo Naukowe Uniwersytetu Szczecińskiego. (in Polish).

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. Adm Policy Ment Health, 42(5), 533-544. https://doi.org/10.1007/s10488-013-0528-y

Phills, J., Deiglmeier, K., & Miller, D. (2008). Rediscovering Social Innovation. Stanford Social Innovation Review, 6.

Prochaska, J. O., & DiClemente, C. C. (1982). Transtheoretical therapy: Toward a more integrative model of change. Psychotherapy: theory, research & practice, 19(3), 276. https://doi.org/10.1037/h0088437

Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1992). In search of how people change: Applications to addictive behaviors. American Psychologist, 47(9), 1102-1114. https://doi.org/10.1037/0003-066X.47.9.1102

Prochaska, J. O., Velicer, W. F., DiClemente, C. C., & Fava, J. (1988). Measuring processes of change: Applications to the cessation of smoking. Journal of Consulting and Clinical Psychology, 56, 520-528. https://doi.org/10.1037/0022-006X.56.4.520

Ram, S. (1987). A model of innovation resistance. ACR North American Advances, 14, 208-212.

Ram, S., & Sheth, J. N. (1989). Consumer Resistance to Innovations: The Marketing Problem and its solutions. Journal of Consumer Marketing, 6(2), 5-14. https://doi.org/10.1108/EUM0000000002542

Ramayah, T., Lee, J. W. C., & Mohamad, O. (2010). Green product purchase intention: Some insights from a developing country. Resources, Conservation and Recycling, 54(12), 1419-1427. https://doi.org/10.1016/j.resconrec.2010.06.007

Reinhardt, R., Hietschold, N., & Gurtner, S. (2019). Overcoming consumer resistance to innovations – an analysis of adoption triggers. R&D Management, 49(2), 139-154. https://doi.org/10.1111/radm.12259

Romain, A. J., Caudroit, J., Hokayem, M., & Bernard, P. (2018). Is there something beyond stages of change in the transtheoretical model? The state of art for physical activity. Canadian Journal of Behavioural Science / Revue canadienne des sciences du comportement, 50, 42-53. https://doi.org/10.1037/cbs0000093

Sadiq, M., Adil, M., & Paul, J. (2021). An innovation resistance theory perspective on purchase of eco-friendly cosmetics. Journal of Retailing and Consumer Services, 59, 102369. https://doi.org/10.1016/j.jretconser.2020.102369

Safari, A., Salehzadeh, R., Panahi, R., & Abolghasemian, S. (2020). Multiple pathways linking environmental knowledge and awareness to employees' green behavior. Corporate Governance: The International Journal of Business in Society, 18(1), 81-103. https://doi.org/10.1108/CG-08-2016-0168

Sandler, R. (2012). Environmental Ethics, Overview. In R. Chadwick (Ed.), *Encyclopedia of Applied Ethics (Second Edition)* (pp. 105-113). Academic Press. https://doi.org/10.1016/B978-0-12-373932-2.00355-0

Santos, A. A. dos, & Ponchio, M. C. (2021). Functional, psychological and emotional barriers and the resistance to the use of digital banking services. Innovation & Management Review, 18(3), 331-348. https://doi.org/10.1108/INMR-07-2020-0093

Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2018). Saturation in qualitative research: exploring its conceptualization and operationalization. Qual Quant, 52(4), 1893-1907. https://doi.org/10.1007/s11135-017-0574-8

Schlegelmilch, B. B., Bohlen, G. M., & Diamantopoulos, A. (1996). The link between green purchasing decisions and measures of environmental consciousness. European Journal of Marketing, 30, 35-55.

Segan, C. J., Borland, R., & Greenwood, K. M. (2006). Can transtheoretical model measures predict relapse from the action stage of change among ex-smokers who quit after calling a quitline? Addict Behav, 31(3), 414-428. https://doi.org/10.1016/j.addbeh.2005.05.023

Spiggle, S. (1994). Analysis and interpretation of qualitative data in consumer research. Journal of Consumer Research, 21, 491-503. https://doi.org/10.1086/209413

DOI: 10.34659/eis.2023.85.2.570

Steinemann, A. (2017). Health and societal effects from exposure to fragranced consumer products. Preventive Medicine Reports, 5, 45-47. https://doi.org/10.1016/j.pmedr.2016.11.011

Steinemann, A. (2018). Fragranced consumer products: sources of emissions, exposures, and health effects in the UK. Air Quality, Atmosphere & Health, 11(3), 253-258. https://doi.org/10.1007/s11869-018-0550-z

Talke, K., & Heidenreich, S. (2014). How to Overcome Pro-Change Bias: Incorporating Passive and Active Innovation Resistance in Innovation Decision Models. Journal of Product Innovation Management, 31(5), 894-907. https://doi.org/10.1111/jpim.12130

Talwar, S., Dhir, A., Scuotto, V., & Kaur, P. (2021). Barriers and paradoxical recommendation behaviour in online to offline (O2O) services. A convergent mixed-method study. Journal of Business Research, 131, 25-39. https://doi.org/10.1016/j.jbusres.2021.03.049

Tan, L. P., Johnstone, M.-L., & Yang, L. (2016). Barriers to green consumption behaviours: The roles of consumers' green perceptions. Australasian Marketing Journal (AMJ), 24(4), 288-299. https://doi.org/10.1016/j.ausmj.2016.08.001

Teng, H.-L., Yen, M., Fetzer, S., Sung, J.-M., & Hung, S.-Y. (2021). Tailoring Health-promoting Programs for Patients with Chronic Kidney Disease: Randomized Controlled Trial. Western Journal of Nursing Research, 43(2), 138-150. https://doi.org/10.1177/0193945920942487

Tezer, A., & Bodur, H. O. (2019). The Greenconsumption Effect: How Using Green Products Improves Consumption Experience. Journal of Consumer Research, 47(1), 25-39. https://doi.org/10.1093/jcr/ucz045

UN. (2015). *Goal 12: Ensure sustainable consumption and production patterns.* https://www.un.org/sustainabledevelopment/sustainable-consumption-production/

Varadarajan, R. (2017). Innovating for sustainability: a framework for sustainable innovations and a model of sustainable innovations orientation. Journal of the Academy of Marketing Science, 45(1), 14-36. https://doi.org/10.1007/s11747-015-0461-6

Verplanken, B., & Orbell, S. (2022). Attitudes, Habits, and Behavior Change. Annual Review of Psychology, 73(1), 327-352. https://doi.org/10.1146/annurev-psych-020821-011744

Vila Franca, C. C., & Ueno, H. M. (2020). Green cosmetics: perspectives and challenges in the context of green chemistry. Desenvolvimento e Meio Ambiente, 53, 133-150. https://doi.org/10.5380/dma.v53i0.62322

Wang, H., Ma, B., & Bai, R. (2019). How Does Green Product Knowledge Effectively Promote Green Purchase Intention? Sustainability, 11(4), 1193. https://www.mdpi.com/2071-1050/11/4/1193

Wiederhold, M., & Martinez, L. F. (2018). Ethical consumer behaviour in Germany: The attitude-behaviour gap in the green apparel industry. International Journal of Consumer Studies, 42(4), 419-429. https://doi.org/10.1111/ijcs.12435

Willig, C., & Stainton Rogers, W. (2017). *The SAGE Handbook of Qualitative Research in Psychology.* SAGE Publications Ltd. https://doi.org/10.4135/9781526405555

Xie, B., Wang, L., Yang, H., Wang, Y., & Zhang, M. (2015). Consumer perceptions and attitudes of organic food products in Eastern China. British Food Journal, 117(3), 1105-1121. https://doi.org/10.1108/BFJ-09-2013-0255

DOI: 10.34659/eis.2023.85.2.570