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Self-relevance diminishes the effectiveness of importance and trustworthiness cues in consumer response to online product-related messages

Wojciech Trzebiński^{1*}, Beata Marciniak² and Piotr Gaczek²

Abstract: The existing literature suggests that people rely less on norms and conventions when the context is more relevant to them. On that account, the paper proposes that the self-relevance of response to an online product offering diminishes the effectiveness of message-related cues regarding the importance of presented product attributes and the source trustworthiness. Three experiments (Study 1: $N = 222$, Study 2: $N = 174$, Study 3: $N = 79$) manipulated self-relevance by asking participants to imagine that they buy products for themselves (vs. the participants merely evaluated products) (Studies 1–2) and exposing participants to a product-related narrative (Study 3). Additionally, message-related cues were presented to the participants (attribute-importance cues in Studies 1–2, source-trustworthiness cues in Study 3). Product preferences (Studies 1–2) and perceived message trustworthiness (Study 3) were measured. The results indicate that in the

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PUBLIC INTEREST STATEMENT

Apart from the product-related content, consumers evaluating products presented online may be cued by the information related to a message itself. For example, consumers may consider an offering focused on generally important features of a product, and consumers may view the message source as trustworthy. We investigated what factors may diminish the effectiveness of such cues. We experimentally demonstrated that consumers who evaluate products to choose one for themselves are less eager to prefer products praised for a feature that is claimed to be important by an influencer. Consumers who have just read a narrative emphasizing the meaning of a product tend less to consider that product descriptions claimed to be written by reliable experts are trustworthy. Our results may suggest marketers when it is worth providing such cues and hint consumers when they should be especially vigilant to those cues.

high self-relevance condition, the effect of attribute = importance cues on consumer product preference is weaker (Studies 1–2), and the effect of source-trustworthiness cues on perceived trustworthiness (Study 3). The paper presents a novel perspective linking the concept of consumer self-relevance with the effectiveness of message-related cues in product offerings. The results suggest to online marketers when to communicate cues regarding attribute importance and source trustworthiness and provide valuable guidelines for policymakers and consumers about how to resist those cues.

Subjects: e-Business; Strategic Management; Advertising; Sales; Consumer Behaviour; Internet / Digital Marketing / e-Marketing; Marketing Communications

Keywords: online communication; product offerings; e-commerce; consumer behavior; self-relevance; product attribute importance; message trustworthiness

1. Introduction

Consumers obtain information about products from many different online sources (, Alalwan, 2018; Filieri et al., 2018). These sources include online reviews, social media, blogosphere, eWOM, and information from producers or consumer reports. At the same time, however, consumers compare information from these sources with their knowledge and make a purchase decision on this basis (Ketelaar et al., 2015; Lee et al., 2015). The existing consumer behavior literature underlines the complexity of decision processes in online environments (e.g., Mirica, 2019), especially in the context of the COVID-19 pandemic (Rydell & Kucera, 2021; Vătămănescu et al., 2021; Watson & Popescu, 2021). Consumers may actively process product-related information coming from various sources, and this way, they may co-create value in e-commerce (cf., Graessley et al., 2019; Meilhan, 2019).

As consumers use various sources of information about product offerings, they also take into account the information credibility or reliability, which can influence the final purchase decision (Ismagilova et al., 2020). In other words, consumers viewing online product messages (e.g., product offerings) may process message-related information apart from product-related information. Specifically, consumers may evaluate to which degree the message pertains to important product attributes and is trustworthy. Such message-related information may serve as a cue in consumer response to online product-related messages. From both theoretical and practical perspectives, it is essential to understand when and why those cues are more effective. This paper focuses on how the role of the importance and trustworthiness message-related cues in consumer response is shaped by the level of product self-relevance, that is, perceiving a product as more connected to their values, goals, and motives (Mackenzie, 1986). For example, consumers may consider the situation of responding to the message as either more relevant to them (e.g., when they are about to buy a product for their use) or less relevant (e.g., when they merely evaluate or browse offerings with no intention to make a purchase).

The classical Elaboration Likelihood Model (ELM; Petty & Cacioppo, 1984), widely used in the domain of online consumer behavior (Ismagilova et al., 2021; Park & Kim, 2008; Teng et al., 2014), provides a general suggestion that when the level of a person's involvement in an evaluated object is higher, the role of message-related cues (called the peripheral route of persuasion) is diminished. This paper proposes how the general ELM mechanism, in which the peripheral route is more dominant in the higher involvement situations, works in the specific context of product online communication when the object involvement corresponds to product self-relevance, and message-related cues are represented by attribute-importance cues and source-trustworthiness cues. Namely, both those cues may represent certain norms and conventions. Specifically, attribute importance may be related to common beliefs related to a product category (cf., Ariely, 2000; Mackenzie, 1986), and source trustworthiness may be communicated with reference to common

beliefs that associate high expertise with website reputation or reviewers' experience in using products (Carbonell et al., 2019). The abundant research suggests that in more self-relevant contexts, consumers react to products less based on cues related to norms and conventions (Chen & Davison, 2019; Karahanna et al., 1999; Kwon et al., 2017; Simonson & Nowlis, 2000; Tao & Xu, 2018; Whitley et al., 2018). However, those studies do not directly involve the concepts of product self-relevance, perceived attribute importance, and message trustworthiness. Consequently, those studies do not explain how the role of message-related cues, like those regarding the importance of presented product attributes or the source trustworthiness, is shaped by the level of response self-relevance. This gap represents the practical dilemmas of when to use message-related cues to improve consumer response to an offering. For example, marketers may invest in convincing consumers that specific attributes of their product are important by hiring a web influencer or that the product description is based on a trustworthy source like a consumer report. Aiming to fill this gap, this paper investigates how the effectiveness of such efforts may depend on the context of consumer response to an offering, i.e., how relevant is this response for consumers.

Drawing on the previous research pertaining to the use of norms, conventions (Chen & Davison, 2019; Karahanna et al., 1999; Kwon et al., 2017; Simonson & Nowlis, 2000; Tao & Xu, 2018; Whitley et al., 2018), and external message-related cues (Pornpitakpan, 2004), this paper proposes that in the case of the high self-relevance, consumers rely less on message-related attribute-importance and source-trustworthiness cues. Specifically, when product self-relevance is higher, attribute-importance cues may be less effective in product preference, and source-trustworthiness may be less effective in perceived message trustworthiness. The hypotheses are tested in three experiments in which product self-relevance was induced by different contexts of consumer response to a product message. This paper offers a novel perspective linking the concept of consumer self-relevance with the effectiveness of message-related cues in online product offerings. Specifically, the current results extend ELM (Ismagilova et al., 2021; Park & Kim, 2008; Petty & Cacioppo, 1984; Teng et al., 2014), as well as the previous notions on the role of norms and conventions in consumer behavior (Chen & Davison, 2019; Karahanna et al., 1999; Kwon et al., 2017; Simonson & Nowlis, 2000; Tao & Xu, 2018; Whitley et al., 2018) into the context of product online communication, self-relevance, and message-related cues related to attribute importance and source trustworthiness. The current results suggest to marketers when to use cues regarding attribute importance and source trustworthiness and provide valuable guidelines for policymakers and consumers about how to resist those cues.

The paper starts with the literature review and hypothesis development, followed by the description of the three experiments and their results. Next, theoretical and practical implications are discussed. The paper ends by presenting its limitations and potential directions for further research.

2. Literature review and hypothesis development

The existing literature suggests that consumers with a high level of product self-relevance, i.e., who perceive a product as more connected to their values, goals, and motives (Mackenzie, 1986), may tend to react to it less based on norms and conventions (Chen & Davison, 2019; Karahanna et al., 1999; Kwon et al., 2017; Simonson & Nowlis, 2000; Tao & Xu, 2018; Whitley et al., 2018). For example, consumers who were less engaged with their appearance and outfit were more dependent on subjective norms when buying clothes (Tao & Xu, 2018). Likewise, priming the idea of going against the flow (possibly related to a higher focus on the self) may make consumers prefer less conventional products (Kwon et al., 2017). Similar results were obtained for consumers with a high (vs. low) need for uniqueness (Simonson & Nowlis, 2000). Self-focused consumers may be less prone to herd behavior (Chen & Davison, 2019). Likewise, consumers choosing products based on hedonic motivation (perhaps of a higher self-relevance than utilitarian) may review a more extensive assortment due to perceiving their preferences as more unique (Whitley et al., 2018). The influence of normative cues may be lower for consumers more experienced with a product

category (Karahanna et al., 1999). However, those research efforts lack direct reference to product self-relevance and do not deal specifically with product-message-related cues regarding attribute importance and source trustworthiness.

Aiming to address this gap, one may theorize that consumers use norms referred to in a product offering. Those norms may relate, in turn, to the importance of the presented product attributes or source trustworthiness.

2.1. Attribute-importance cues

Consumers may hold beliefs about how specific attributes are generally important to people for a given product category (cf., Ariely, 2000; Mackenzie, 1986). Those beliefs are not focused on personal importance but rather on norms related to attribute importance. This perceived normative importance may serve as a cue for consumers who respond to product offerings. Namely, those consumers may prefer the alternatives superior in terms of attributes perceived as generally important. According to the literature suggestions mentioned above (Chen & Davison, 2019; Karahanna et al., 1999; Kwon et al., 2017; Simonson & Nowlis, 2000; Tao & Xu, 2018; Whitley et al., 2018), perceiving products from a more personal perspective—specifically, related to the response to product offering—may decrease consumer preference for conventional options that comply with norms and consensuses. Accordingly, the situated dynamics framework (Leung & Morris, 2015) posits that people use norms more in the situational contexts of the presence of other people and the absence of personal preferences. One may assume that self-relevance of consumer response to a product represents a more personal (vs. social) perspective, and normative importance represents norms and conventions perceived by consumers. Consequently, it is reasonable to expect that self-relevance decreases consumer preference for product alternatives superior in terms of attributes perceived as generally important. Likewise, a study by Trzebiński et al. (2021) suggests that consumers invest more of their cognitive effort in using the information on attribute importance when their response to a product is less self-relevant (i.e., takes a form of mere evaluation instead of choosing a product option for own use). Let us use smartphones as an example of a product category. Suppose consumers perceive a smartphone's processor speed as an important attribute. Then, their preference for high-speed smartphone models may be lower when they consider buying a smartphone (high self-relevance) than when they merely evaluate those smartphones with no intention to buy (low self-relevance). Consumers may also receive direct suggestions on the importance of certain attributes given by other people (e.g., Ariely, 2000) and provided within product communication by marketers (Mackenzie, 1986; Z. Wang et al., 2022a) and regulators (Schmeiser, 2014). For example, a marketer may hire web influencers to convince consumers that smartphone durability is important. One may imply that in the case of high (vs. low) response self-relevance, those cues should be less influential in consumer reaction to the offering. Specifically, applying those cues may have a weaker effect on consumer preference for product alternatives described as superior in terms of the attributes communicated as important. Therefore, it is hypothesized that

H1. For online product offerings, the preference for a product alternative depicted as superior in terms of normatively important attributes is lower in the case of high (vs. low) response self-relevance.

H2. For online product offerings, the effect of communicating the high importance of selected product attributes on the preference for a product alternative depicted as superior in terms of those attributes is weaker in the case of high (vs. low) response self-relevance.

2.2. Source-trustworthiness cues

Consumers viewing online product information use trust various cues of message trustworthiness like the information of the actual product experience of a product reviewer (Carbonell et al., 2019).

Message-related cues provided alongside an online offering may also pertain to the source's trustworthiness. For example, a marketer may state that independent experts from a consumer organization prepared the product description. Trustworthiness cues used in online retail include seals of approval, return policy, awards, and security and privacy disclosures (S. Wang et al., 2004). Consumers may consider those cues as representing a common belief that all intentionally communicated information is relevant. This presumption, called the principle of relevance (Sperber & Wilson, 1996), belongs to conversational norms used by people reacting to intentional communication (Meyvis & Janiszewski, 2002). Coming back to the example, when the marketer highlights that the experts are independent and they represent a consumer organization, consumers may use the principle of relevance. Namely, they may infer that the experts' independence and affiliation mentioned by the marketer matters. That is, those experts provide reliable and trustworthy information about products. Consequently, one may consider this reliance on trustworthiness cues as indicative of using norms. Following the same argument regarding the negative effect of taking personal perspective on using norms and conventions (Chen & Davison, 2019; Karahanna et al., 1999; Kwon et al., 2017; Leung & Morris, 2015; Simonson & Nowlis, 2000; Tao & Xu, 2018; Whitley et al., 2018), one may propose that a more self-relevance response to a product (representing more personal perspective, as discussed above) diminishes the influence of the trustworthiness cues on consumer perceived trustworthiness of the product message. For example, consumers who consider buying a smartphone (high self-relevance) may be less susceptible to suggesting that a smartphone description is trustworthy because it comes from independent experts. In line with this theorization, several studies indicate that issue involvement diminishes the effect of message trustworthiness cues on its persuasiveness (for review, see Pornpitakpan, 2004). However, to the best of our knowledge, no study investigated this relationship in the case of response self-relevance (which is related to a situation and not to a product or issue) and perceived message trustworthiness. To fill this gap in the domain of online product communication, one may hypothesize that

H3. For online product offerings, the positive effect of communicating the source trustworthiness on the perceived message trustworthiness is weaker in the case of high (vs. low) response self-relevance.

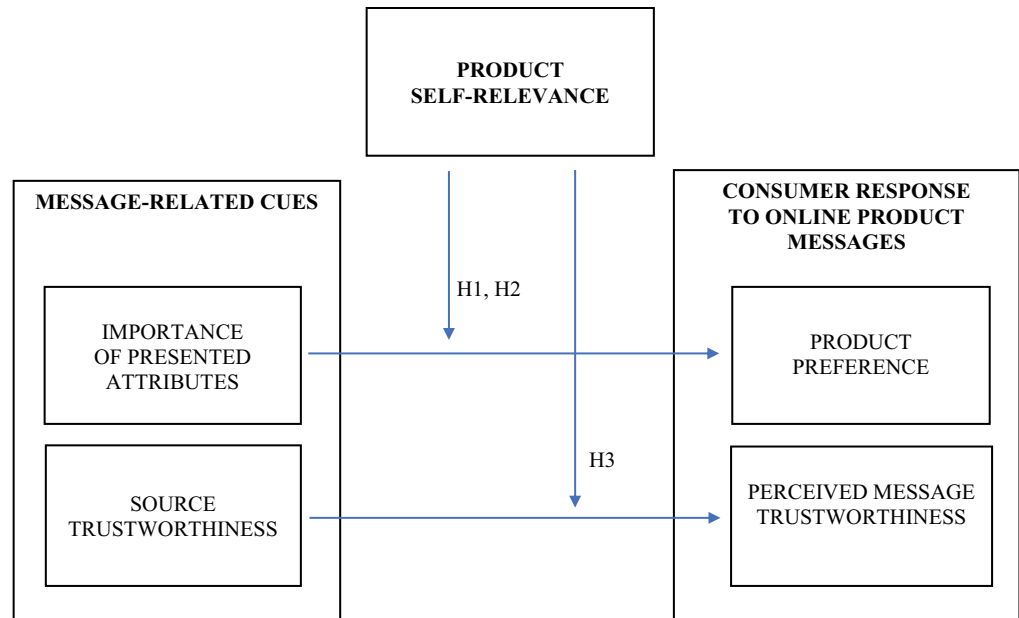
See the conceptual model in Figure 1. The above hypotheses have been tested in three experiments (Studies 1–3). Experiments are suitable for causal research when dependent variables (here: product self-relevance and message-related cues) are possible to be manipulated (cf., Eisend & Kuss, 2019). H1 was tested in Study 1 and Study 2, H2 was tested in Study 2, and H3 was tested in Study 3.

3. Study 1

3.1. Method

Study 1 aimed to test H1 (the effect of response self-relevance on the preference for normatively-important product attributes) based on the stimuli containing product attributes perceived as normatively important. The experimental approach of Study 1 and Study 2, similar to Celsi and Olson (1988), Houston and Walker (1996), Raimondo et al. (2019), was to alter the marketing stimuli (here: response situation) to change the level of participant involvement in the presented products. All the studies employed smartphones as a product category. Smartphones are widely used and highly involve consumers as smartphone users are typically in “perpetual contact” with their smartphones which intermediate user social relationships (Campbell et al., 2020). Consumers increasingly rely on smartphones in daily activities, making smartphones part of their self-identity (Sun et al., 2020), even leading to smartphone dependency (Li & Lin, 2019). This high involvement in smartphones supports participant engagement. More importantly, the involvement may help induce a high product self-relevance in the experimental manipulations. Specifically, when the

Figure 1. Conceptual model.



participants were instructed to imagine they are about to buy a smartphone for their own use (the operationalization of high self-relevance in Study 1 and Study 2) or read a story about the meaning of a smartphone in everyday life (high self-relevance operationalization in Study 3), those stimuli might resonate with the reality of their experience with smartphones. In other words, assuming smartphones were indeed high involving for the participants, there was a better chance that in the high self-relevance condition, they would actually activate connections between the smartphones mentioned in the stimuli and their personal values, goals, and motives, which would constitute high self-relevance of participant response to the stimuli. All the studies are scenario-based to reduce emotional reactions and rationalizations resulting from participants' personal experiences (Sugathan & Ranjan 2020). All the experiments used the online data collection technique congruent with our scenarios related to the online shopping context (cf. Wu et al. 2020).

In this study, we also checked the effect of consumer analytical information processing. We speculated the relationship in H1 may be more robust in the case of analytical (vs. automatic) information processing by a consumer because the analytical information processing may enhance the use of attribute information by consumers (Aarts et al. 1997, Hoffmann et al. 2013, Mantel & Kardes 1999, Scheibehenne et al. 2015, Trzebiński et al., 2021).

In marketing communication, one may naturally contrast attribute importance with attribute abstractness. Namely, consumers may perceive abstract attributes as unimportant (Mackenzie, 1986; Miller et al., 2007) and vague (Snelders & Schoormans, 2004). Therefore, in our stimuli, we presented the normatively important attributes alongside the corresponding set of abstract attributes. This approach of contrasting the focal property with the other property, considered antagonistic, is widely used in the consumer behavior literature (e.g., Keller & McGill, 1994; J. Wang et al., 2022b). Specifically, in the current study, the alternatives which were superior in terms of normatively important attributes were inferior in terms of abstract attributes. We intended to contrive a more realistic situation (cf. Roy 2017) that should improve both the measurement quality and external validity by applying this trade-off.

Two hundred twenty-two students ($M_{age} = 23.0$, $SD_{age} = 1.8$, 50.5% females) participated in the online study, recruited by marketing students for course credits (like Glaser & Reisinger, 2021) based on the following criteria: age between 18 and 30, good declared level of Polish, and daily use

of a smartphone (see sample characteristics in Appendix A). The design was 2 (response self-relevance: high vs. low) \times 2 (analytical vs. automatic information processing), between-subject. The participants were randomly assigned to the experimental conditions of high and low self-relevance ($N_{\text{high self-relevance}} = 120$, $N_{\text{low self-relevance}} = 102$) and analytical and automatic information processing ($N_{\text{analytical}} = 120$, $N_{\text{automatic}} = 102$). In all the studies, the assignment probability was equal across conditions, and we controlled the number of participants in each condition, which ensured a similar number of participants for the conditions. We followed the classical operationalization of product self-relevance as a degree consumers consider a product to be acquired and used or possessed by them (Celsi & Olson, 1988). In a high self-relevance condition, the participants were asked to imagine they were browsing the web to choose a new smartphone for themselves. They had to form a preliminary assessment of how likely they were to select certain smartphone models. In a low self-relevance condition, the participants had to imagine they were advising their friend working in smartphone sales. The friend asked them to assess how likely are certain smartphone models to succeed in the market. This way, we intended to make our participants focused on mere evaluation and less on considering their values, goals, and motives. Like Keller and McGill (1994), we asked the participants to deliberate on their assessments in the high analytical processing condition, as they would have to express it during a dedicated visit to a sales point. In the low analytical processing condition, the participants had to assess smartphones quickly, as they would have to express their assessment immediately via some online device. Then, the participants subsequently read about three pairs of smartphone models. In each pair, the first model was described, compared to the second one, as superior in a normatively important attribute (respectively, battery life, processor speed, and disk space) but inferior in an abstract attribute (respectively, image quality, ease of use, and sound quality). The attributes' perceived normative importance was pretested by an independent sample of the same population (283 students) using the question "How are the attributes generally important for smartphone users?" without reference to a participant's personal perspective. To increase respondent engagement in rating the importance, we asked them first to indicate the most important attribute (the right anchor), then the least important one (the left anchor). Then they rated the remaining attributes (like Teas 1993). The important attribute in each pair was indeed perceived as more important than the corresponding abstract attribute (p 's < .05). Instead of doing it within the study, we used a separate pretest to check the normative importance to avoid a disturbance caused by personal attribute importance that might be changed by self-relevance manipulation.

For each pair of smartphone models, the study participants expressed their preference between the two models. Finally, the participants answered manipulation check items and demographics. To avoid the "self-generated validity" (Feldman et al., 1998; Lunardo & Rickard, 2019), we first measured the preference (i.e., dependent variable) and then went on with other measurements, countering the order to our hypothesized causality. We stuck to this approach in all the subsequent studies.

The preference between two smartphone models (an important-attribute superior one vs. an abstract-attribute superior one) was measured using a ten-point response scale anchored by the descriptions of each smartphone (1—the preference for an abstract-attribute superior model; 10—the preference for an important-attribute superior model). For example, for the pair "disc space" (an important attribute) vs. "sound quality" (an abstract attribute), the instruction explains: "You browse across a set of smartphone models. There are models with different amounts of disc space and different sound quality levels among them. Other characteristics of those models are almost the same. You are comparing the smartphones with more disc space, but with worse sound quality, and the smartphones with less disc space, but with better sound quality." Then, the response scale was anchored by "the largest disc space and the worst sound quality" (left anchor, coded as 10), and "the best sound quality and the smallest disc space" (right anchor, coded as 1). Self-relevance manipulation was checked by an eight-item scale partially adapted from Houston and Walker (1996), using a five-point semantic differential (Cronbach's alpha at the level of

$\alpha = .884$ indicated the satisfactory internal reliability of the measurement). Sample items were “your decision [to choose a smartphone] would be: not related to you at all/directly related to you,” and “choosing a smartphone would be: unimportant to you/important to you.” A four-item scale checked analytical information processing manipulation ($\alpha = .803$, supporting internal reliability) using five-point Likert-type items (totally disagree (1)/totally agree (2)) adapted from (Griffin et al., 2002) and (Smerecnik et al. (2012)). Sample items were “I responded very carefully” and “I thoroughly deliberated on my responses.” To assess the two measurement scales, we ran Exploratory Factor Analysis (EFA; Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) = .838, Bartlett’s $p < .001$; extraction Method: Principal Component Analysis (PCA); VARIMAX rotation). Three components had eigenvalues above 1. In support for discriminant validity, the self-relevance items loaded on the first two components, and the analytical processing items loaded on the remaining component with loadings above the .5 cut-off, and loading differences between the two components above .2 (Ferguson & Cox, 1993). For the fixed number of two factors to extract, self-relevance items loaded on the first component and the analytical processing items loaded on the second component. Coding details and descriptives of the measurement scale items are presented in Appendix B.

Open-ended questions measured perceived attribute abstractness. We asked the participants to enumerate up to three detailed characteristics of which a given attribute consisted (“Smartphone features may consist some more detailed characteristics. If a given feature consists of more detailed characteristics in your opinion, please enumerate up to three such characteristics.”). Participants’ responses were coded independently by three raters, who counted detailed characteristics mentioned by the participants (for each attribute, $\alpha > .9$, supporting internal reliability). We aggregated each of the above measurements into a single index.

3.2. Results and discussion

Both manipulations were successful as checked by the respective indices (ANOVA with self-relevance and analytical processing conditions as factors and self-relevance index as a dependent variable: $M_{\text{high}} = 4.033$, $M_{\text{low}} = 3.548$, $F(1,218) = 24.273$, $p < .001$; ANOVA with self-relevance and analytical processing conditions as factors and analytical information processing index as a dependent variable: $M_{\text{high}} = 3.774$, $M_{\text{low}} = 3.273$, $F(1,218) = 22.045$, $p < .001$). For each pair of smartphone models, an abstract attribute showed a higher abstractness perception index than an important one (p 's $< .05$).

In line with H1, the participants in the high self-relevance condition less preferred the smartphone model, which was superior in “disk space” (a normatively important attribute) and inferior in “sound quality” (an abstract attribute) over the contrasting model (ANOVA with self-relevance and analytical processing conditions as factors and normatively-important-attribute-superior product preference as a dependent variable: $M_{\text{high}} = 2.374$, $M_{\text{low}} = 3.063$, $F(1,197) = 4.556$, $p = .034$, after excluding non-native speakers). The average preference for normatively-important- (vs. abstract-) attribute-superior product for all three pairs of smartphone models was lower for the high self-relevance condition, in line with expectations. However, the difference was marginally significant (ANOVA with self-relevance and analytical processing conditions as factors and normatively-important-attribute-superior product preference as a dependent variable: $M_{\text{high}} = 2.362$, $M_{\text{low}} = 3.009$, $F(1,218) = 2.784$, $p = .097$). No other effects occurred, including the analytical processing.

While the expected effect of self-relevance on normatively important attribute preference occurred, it appears limited to a certain pair of attributes and native speakers, possibly because of a better understanding of the questionnaire among this group. Perhaps, some normatively important attributes (like battery life) may also be of personal importance to the participants diminishing the expected effect of self-relevance. In other words, attribute pairs were not inclusive, i.e., the normatively important attributes born some different meanings than the corresponding abstract attributes. Therefore, the personal importance of some normatively important attribute (like battery life) might be higher than the personal importance of the corresponding abstract

attribute (like image quality), which would be even more detrimental to the expected effect of response self-relevance. In summary, normatively important attributes in a real market context may also be personally important to consumers, thus highly connected with their personal goals, which may diminish the negative effect of self-relevance on the preference for those attributes.

Analytical processing does not appear to enhance the effect of self-relevance on normative-important attribute preference. Communicating attributes explicitly to consumers might make them use attribute information regardless of the analytical vs. automatic information processing.

The above results provide preliminary support for applying ELM (Ismagilova et al., 2021; Park & Kim, 2008; Petty & Cacioppo, 1984; Teng et al., 2014) and the previous notions on the role of norms and conventions (Chen & Davison, 2019; Karahanna et al., 1999; Kwon et al., 2017; Simonson & Nowlis, 2000; Tao & Xu, 2018; Whitley et al., 2018) in the context of message-related cues product online communication. Namely, it appears that a more self-relevant situation (like buying a product for their own use) makes consumers less prone to product communication related to normatively important product attributes (like a smartphone's disk space).

4. Study 2

4.1. Method

Study 2 replicated the test of H1 and manipulated the communication of cues on attribute importance, which has allowed testing H2 (the effect of response self-relevance \times communicated importance-cues interaction on the preference for product attributes).

In Study 1, the self-relevance effect on normatively-important attributes preference appeared limited. We attributed this to the interference between normative and personal importance and the lack of inclusiveness in attribute pairs. Namely, normatively important attributes might refer to other meanings than the corresponding abstract ones. Moreover, the setting of Study 1 represented the situation in which the message-related cues came from consumer product knowledge (i.e., which attribute presented in the message is more or less normatively important) and not directly from the marketer's communication. This study aimed to overcome these limitations. First, we introduced a manipulation for communicating the attributes' normative importance. This way, we attempted to distinguish normative importance from personal importance better. Second, we used inclusive pairs of attributes, i.e., the abstract attribute was intended to comprise the meaning of the corresponding attribute. Apart from replicating the test for H1, we checked if, in the high-self-relevance condition, the effect of the communicated importance cues is weaker (H2).

One hundred seventy-four students ($M_{age} = 22.6$, $SD_{age} = 2.0$, 59.8% females) participated in the online study, recruited by marketing students for course credits based on the following criteria: age between 18 and 30, good declared level of Polish, and daily use of a smartphone (see sample characteristics in Appendix A). The design was 2 (response self-relevance: high vs. low) \times 2 (communicated importance cues: present vs. absent), between-subject. The participants were randomly assigned to the experimental conditions of high and low self-relevance ($N_{high\ self-relevance} = 87$, $N_{low\ self-relevance} = 87$) and present and absent communicated importance cues ($N_{cues\ present} = 91$, $N_{cues\ absent} = 83$).

As in Study 1, the task for the participants was about assessing smartphone models. Self-relevance was manipulated the same way as in Study 1. To manipulate the communicated importance cues, we asked the participants to imagine reading the advice given by a well-known and reliable web influencer knowledgeable about smartphones. In the *present* communicated-importance-cue condition, the influencer listed three attributes that should be considered when choosing a smartphone (i.e., fastness of app opening; resolution of pictures taken by a camera; durability and reliability of a battery). In the *absent* communicated-importance-cue condition, we instructed the participants that various influencers provided ambiguous and

inconclusive information on which attributes should be considered when buying a smartphone. Then, the participants read descriptions of six smartphone models. Unlike Study 1, each model was depicted by only one attribute, according to a fictitious consumer report. Three models were characterized by more abstract attributes (i.e., fastness; quality of pictures taken by a camera; durability and reliability). The three other models were characterized by corresponding more concrete attributes (i.e., fastness of app opening; resolution of pictures taken by a camera; durability and reliability of a battery). Those attributes were focal for the study, as they were listed by the web influencer in the present communicated-importance-cue condition. The focal (concrete) attributes are composed as included in the corresponding abstract ones (e.g., “fastness of app opening” is a concretization of “fastness”). In the two first pairs of attributes (related to fastness and picture quality, respectively), the concretized attribute (related to opening apps and picture resolutions, respectively) appears to be rather generic. It does not add any significant meaning to the abstract part (irrelevant concretization, cf., Meyvis & Janiszewski, 2002). Thus, the only difference lies in the level of abstraction. Conversely, in the case of the last pair (related to durability and reliability), the concretized attribute (related to a battery) was intended to bear another significant meaning, as discussed above. The additional meaning may make the concretized attribute even more associated with consumer personal values and motives than the abstract attribute (Van Ginkel Bieshaar, 2012). Hence, we expected the effect of response self-relevance to be weaker or even invisible for the durability-reliability pair.

All models were presented together, aiming to force reading all descriptions. Next, we asked the participants to allocate 100 points between those models according to their interest in each model (“To which extent does each smartphone model gain your interest? To which extent are you willing to learn more about that model? Please allocate 100 points between those models. The more points you assign to a model, the more interest it gains.”). This way, we intended to engage the participants in the task as they might assess the models simultaneously. This setting should enhance the attribute trade-off processing (Jang & Yoon 2016), making the task more engaging and realistic. The questionnaire concluded with manipulation checks and demographics.

The difference between the number of points allocated for concrete vs. abstract smartphone model descriptions indicated the concrete vs. abstract description preference. The response self-relevance measurement scale included all the items used in Study 1, except for the last item (“Choosing a smartphone: would not be significant to you/would be significant for you”), which was revealed to be perceived as redundant during the pretest. Additionally, we developed three items directly referring to the connection between the product response and consumer personal values, goals, and motives (“Your decision [regarding the smartphone models]: would not have any impact on things that are important in your life/would have some impact on things that are important in your life; would not matter for anything you want to do in your life/ would matter for some things you want to do in your life; would not support attaining anything that matters in your life/would support attaining something that matters in your life.”). The items were semantic differential. The scale ($\alpha = .862$, supporting internal reliability) was further analyzed as an aggregated index. Coding details and descriptives of the measurement scale items are presented in Appendix B.

For the present communicated-importance-cue condition, we checked the recognition of the attributes communicated by the influencer asking the participants to indicate them in a list of all six attributes describing the presented smartphone models (“Please mark the three smartphone features which were pointed out by the blogger as the features one should take into account when choosing a smartphone.”).

Perceived attribute abstractness was measured differently than in Study 1. It could be unnatural for the participants to enlist detailed features for an abstract attribute and the corresponding concretized attribute. We first asked the participants to group the six attributes into three pairs to check if the grouping pairs comply with our pairs of corresponding attributes (“In the below list, there are six smartphone features. Split them into three pairs of similar features. Each feature may

belong only to one pair.”). Second, like De Angelis et al. (2017) and Miller et al. (2007), the participants evaluated each attribute in a five-point response scale anchored with “very detailed” and “very general.” Those ratings were averaged to form the perceived abstractness index. We used these two measurements to assess if the participants perceived the abstract attributes as more abstract and comprising the meaning of the corresponding concrete ones.

4.2. Results and discussion

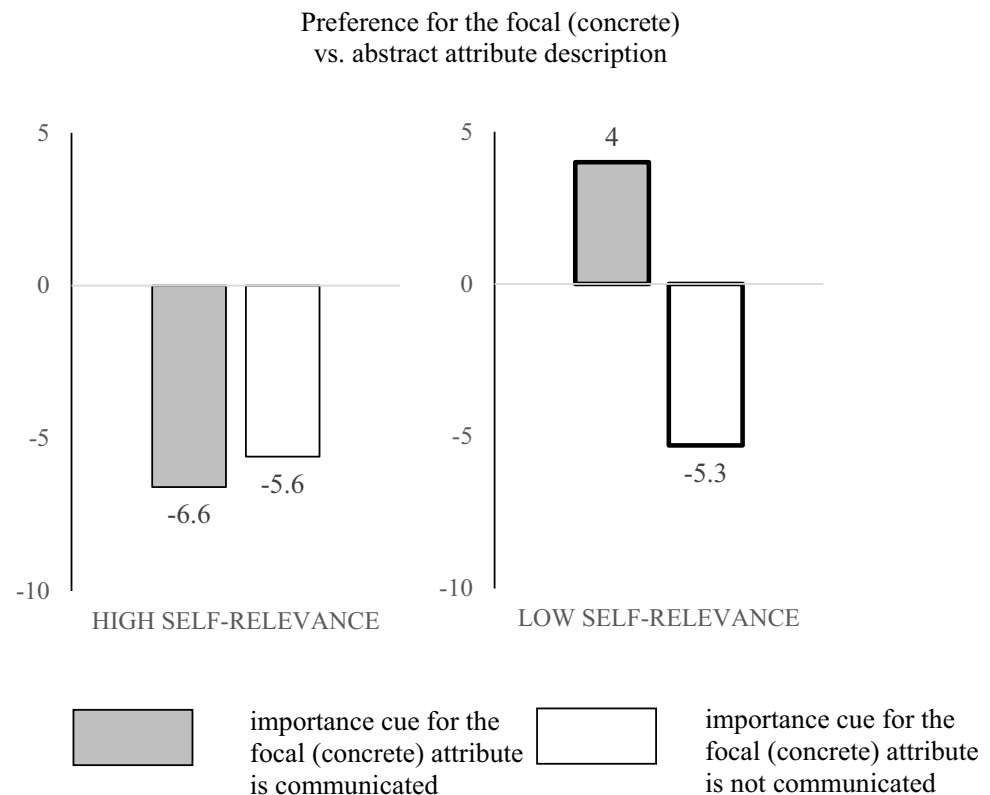
The self-relevance manipulation appeared successful as checked by self-relevance index (ANOVA with self-relevance and communicated-importance-cue conditions as factors and self-relevance index as a dependent variable: $M_{\text{high}} = 3.684$, $M_{\text{low}} = 3.414$, $F(1,170) = 5.868$, $p = .016$). The communicated importance cue (the present condition) was acquired by the participants, as the fraction of those who correctly indicated all three attributes mentioned by the influencer was higher than the expected frequency in the case of random choice (i.e., $f_{\text{corr}} = 48.4\%$, $f_{\text{rand}} = 5\%$; $\chi^2(N = 91) = 7.748$, $p = .005$). Three pairs of corresponding attributes were pointed out by the majority of the participants in the grouping task in line with our intention ($f_{\text{acc}} = 85.6\%$, $\chi^2(N = 174) = 88.368$, $p < .001$). Within each pair, an attribute intended to be more abstract was indeed evaluated so by 80.5% of the participants (for durability and reliability—91.4%, for fastness—91.4%, for picture quality—88.5%), and the averaged abstractness index for three abstract-attribute descriptions ($\alpha = .762$, supporting internal reliability) was higher than the corresponding index for concrete-attribute descriptions ($\alpha = .751$, supporting internal reliability) (paired-sample t-Student test: $M_{\text{abstract}} = 3.814$, $M_{\text{concrete}} = 2.467$, $t(173) = 13.395$, $p < .001$). The same occurred separately for each attribute pair (p 's $< .001$). This indicates that the smartphone attributes were perceived as inclusive within the three pairs, according to our intention.

Finally, we checked the point allocation between smartphone models within each attribute pair. In line with our above considerations, a concrete-attribute description is preferred only in the case of the durability-and-reliability pair (ANOVA with self-relevance and communicated-importance-cue conditions as factors and concrete-description preference as a dependent variable: $M_{\text{abstr}} = 15.1$, $M_{\text{concr}} = 21.1$, $t(173) = 5.939$, $p < .001$). For fastness pair, it was opposite: an abstract-attribute pair was preferred ($M_{\text{abstr}} = 17.4$, $M_{\text{concr}} = 14.9$, $t(173) = 2.332$, $p = .021$). No significant difference occurred for the picture-quality pair. It suggests that the concretized attribute in the durability-and-reliability pair indeed bears an additional, significant meaning, which is not the case in the two first pairs.

To test H2, we analyzed the preference for concrete vs. abstract descriptions.¹ We excluded the participants who did not group attributes into analyzed pairs and the participants who did not indicate the abstract attributes in those pairs as more abstract than the other attributes. Then, we run a series of ANOVAs with self-relevance and communicated-importance-cue conditions as factors and concrete-description preference as a dependent variable.

For fastness and picture-quality pairs, both containing the concretized attribute with no significant meaning added, in line with H2, the positive effect of communicated importance cues (stating the high importance of the concrete attributes) on the concrete descriptions' preference occurred only in the low self-relevance condition ($M_{\text{comm}} = 3.8$, $M_{\text{uncomm}} = -6.2$, $F(1,58) = 8.554$, $p = .005$; for high self-relevance: NS). However, the interaction between the manipulations was only marginally significant ($F(1,123) = 2.944$, $p = .089$). The expected effects were better visible when the first pair (fastness) was analyzed separately (Figure 2). The concrete description was less preferred for high vs. low self-relevance ($M_{\text{high}} = -6.1$, $M_{\text{low}} = -0.7$, $F(1,133) = 4.766$, $p = .031$), and, more importantly, there occurred an interaction between two manipulations ($F(1,133) = 4.229$, $p = .042$). The positive effect of communicated importance cues on the concrete description preference was present, in support of H2, only in low self-relevance condition ($M_{\text{comm}} = .04$, $M_{\text{uncomm}} = -5.2$, $F(1,55) = 5.289$, $p = .025$; for high self-relevance: NS). Moreover, in line with H1, when the importance cues was communicated, there occurred a negative effect of self-relevance on the preference for the concrete (vs. abstract) attribute description ($M_{\text{high}} = -6.6$, $M_{\text{low}} = 4.0$, $F(1,74) = 8.544$, $p = .005$; for normative-importance uncommunicated: NS).

Figure 2. The attribute preference for the high vs. low. response self-relevance, and the presence vs. absence of a communicated importance cue.



As expected, no effects of self-relevance occurred for the durability-reliability pair.

Self-relevance appears to diminish the positive influence of communicating the concrete attributes' normative importance on consumer preference towards more concrete-attribute product descriptions. Moreover, this relationship seems limited to choices where the concretized attribute does not bear any additional meaning to consumers. It suggests that self-relevance does not diminish the effect of the communicated importance cues when the focal attribute is personally meaningful for consumers.

The above results provide more robust support for applying the previous notions on the role of cues, norms, and conventions (Chen & Davison, 2019; Ismagilova et al., 2021; Karahanna et al., 1999; Kwon et al., 2017; Park & Kim, 2008; Petty & Cacioppo, 1984; Simonson & Nowlis, 2000; Tao & Xu, 2018; Teng et al., 2014; Whitley et al., 2018) in the product online communication. Here, the attribute importance was directly presented to the participants as a norm/convention because it was communicated explicitly as a conclusion provided by an expert. It appears that such an explicit normative argument is less effective in a more self-relevant situation.

5. Study 3

5.1. Method

Study 3 has manipulated the message source trustworthiness cues, which has allowed to test H3 (the interaction of self-relevance and communicated trustworthiness cues on perceived trustworthiness). To enhance the robustness of our investigation of the self-relevance role in the effectiveness of

message-related cues, we used a different method compared to Studies 1–2. Unlike them, we applied a narrative-based manipulation for self-relevance. The experimental approach was to activate the participants' connection to the presented product using a product-related story, similar to Escalas (2004) and Lim and Childs (2020). We also manipulated the communicated source trustworthiness cues based on the communicated authenticity of online user reviews. Moreover, instead of close-ended ratings used to measure consumer responses in Studies 1–2, we used open-ended questions in the form of thought protocols, measuring the perceived message trustworthiness.

Seventy-nine undergraduate students (58% female; $M_{\text{age}} = 22.5$, $SD = 1.4$) participated in the study in exchange for course credit (see sample characteristics in Appendix A). The experimental design was 2 (self-relevance: low vs. high) \times 2 (communicated source trustworthiness cues: present vs. absent), between-subject. The participants were randomly assigned to the experimental conditions of high and low self-relevance

($N_{\text{high self-relevance}} = 37$,

$N_{\text{low self-relevance}} = 42$) and present and absent communicated source trustworthiness cues ($N_{\text{cues present}} = 42$, $N_{\text{cues absent}} = 37$). The questionnaire consisted of two parts, i.e., the self-relevance manipulation task and the remaining part. Those two parts were ostensibly unrelated to each other to divert participants' attention from the self-relevance manipulation.

In the self-relevance manipulation part, the participants read a short story about a day-in-the-life of a student character, which was gender-matched with a participant to improve the identification with the character. In the high self-relevance condition, the story referred to a smartphone, illustrating its meaning in a student's life (e.g., waking up by a smartphone alarm clock, working out using a smartphone app). The story had the same structure in the low self-relevance condition, but it did not refer to a smartphone. After reading the story, the participants answered a set of questions about the story, which referred (did not refer) to a smartphone in the high (low) self-relevance condition. We intended those questions to enhance the perception of a smartphone as high or low self-relevant, respectively.

The second part of the questionnaire started with the communicated source trustworthiness cue manipulation. Participants were asked to imagine they browse a website looking for smartphone offers. Then, in the present communicated-source-trustworthiness-cue condition, the participants read that the website was renowned and it presented product descriptions based on reviews made by experienced product users. In the *absent* communicated-source-trustworthiness-cue condition, the participants read that the website presented product descriptions based on reviews made by accidental product users whose authenticity was not checked by the website.

Then, the participants were shown the descriptions of two smartphone models based on six attributes (i.e., image quality, sound quality, file storage, screen resolution, volume regulation, and disc space). The respondents were asked to express their smartphone preferences and then justify their choices in open-ended questions. Specifically, the participants were asked to compose a retrospective thought protocol (like Escalas, 2004; Priester & Petty, 1995, 2003], Shiv & Fedorkhin, 1999; Shiv & Huber, 2000). That is, they had to describe in their own words how they had been deciding which response option to choose, step by step. Although the concurrent protocol is considered more effective than the retrospective protocol in providing detailed information on decision steps (Kuusela & Paul 2000), we decided to use the latter approach to avoid possible disturbances in the preference formation.

The respondents wrote down their thoughts while forming their preferences ("You have expressed your evaluation of the two smartphones. We are interested in how you have made this conclusion. We would like you to recall as precisely and reliably as possible what has led you to your response. Please write down only what you have thought about then, nothing more. Please give a detailed answer below. Usually, respondents write several sentences."). We ask a series of five open-ended questions related to subsequent decision-making steps ("Firstly, I thought about ..

. ”; “Next, I thought about ... ” (three times); “Finally, I thought about ... ”). This design aimed to encourage the participants to elaborate and describe their thoughts more precisely, as self-reporting one’s thoughts may provide vague answers (cf. Wright 1975). The participants were required to answer only the first and last questions (about their first and final thought, respectively). However, they were suggested that “respondents usually write one sentence for each question.” Two raters blind to experimental conditions independently coded the protocols. For each of the six attributes used in the product descriptions, raters indicated the degree to which an attribute was mentioned, coded as 0 (no reference), 1 (implicit or indirect reference), and 2 (explicit reference). In the case of any reference to an attribute, raters further indicated the perceived trustworthiness of information related to the attribute (from 0 [totally untrustworthy] to 5 [very trustworthy]). Those ratings were averaged across all attributes to form the perceived trustworthiness index. For each attribute, the two raters consistently coded the degree to which an attribute was mentioned (all r 's > .5, p 's < .001; supporting the internal reliability of the raters’ coding).

5.2. Results and discussion

There occurred an interaction effect of response self-relevance and communicated source trustworthiness cues on perceived trustworthiness measured in thought protocols (ANOVA with self-relevance and communicated-source-trustworthiness-cues conditions as factors and perceived trustworthiness as a dependent variable: $F(1,51) = 4.455, p = .040$). The results of follow-up comparisons are in line with H3. For the high-trustworthiness condition, the perceived trustworthiness was lower in high (vs. low) self-relevance condition (independent-sample t-Student test: $M_{\text{high}} = 2.117, M_{\text{low}} = 2.378, t(26.226) = 2.135, p = .042$; for low trustworthiness: NS). Additionally, for the high-self-relevance condition, the effect of trustworthiness is marginally significant. Namely, the perceived trustworthiness is slightly lower in the high (vs. low) trustworthiness condition (independent samples t-Student test: $M_{\text{high}} = 2.117, M_{\text{low}} = 2.321, t(24) = 2.135, p = .099$; for low self-relevance: NS).

In line with our expectations, the above results suggest that response self-relevance may diminish the usage of source trustworthiness cues in online product-related messages. In general, Study 3 supports the notion that response self-relevance makes consumers resistant to message-related cues. This relationship was demonstrated by Study 3 to remain when the response self-relevance manipulation was disconnected from the product response task, and the response was expressed by the participants more naturally and spontaneously, in their own words and without direct asking about message trustworthiness.

The above results provide additional support for applying the previous notions on the role of cues, norms, and conventions (Chen & Davison, 2019; Karahanna et al., 1999; Kwon et al., 2017; Petty & Cacioppo, 1984; Simonson & Nowlis, 2000; Tao & Xu, 2018; Whitley et al., 2018) in the product online communication. Here, the source trustworthiness was communicated based on norms/conventions by presenting the website as reputable and the product reviewers as experienced in using products. It appears that in a more self-relevant situation, such explicit normative argument is less effective in perceived message trustworthiness.

6. Conclusion

The findings of the three experiments (Studies 1–3) address the research question of how the effectiveness of message-related cues depends on the context of consumer response to an offering. Specifically, our results consistently indicate that those cues are less effective in a more self-relevant situation (e.g., buying a product for own use or reading a product-related narrative). While in Study 1, which did not apply a direct reference to norms/conventions, the support was partial, Studies 2–3, which were based on explicitly normative arguments (i.e., attribute importance claimed by a blogger, reputable website, and expert reviewers presented as a trustworthy source), provided clear evidence for the self-relevance effects.

6.1. Theoretical implications

The results of this research suggest that ELM (Ismagilova et al., 2021; Park & Kim, 2008; Petty & Cacioppo, 1984; Teng et al., 2014) can be applied to the product online communication. In this case, the self-relevance of consumer response to product descriptions represents involvement, while message-related cues take the form of attribute-important cues and source-trustworthiness cues. Even more importantly, our research extends the existing literature on consumer reliance on norms and conventions (Chen & Davison, 2019; Karahanna et al., 1999; Kwon et al., 2017; Simonson & Nowlis, 2000; Tao & Xu, 2018; Whitley et al., 2018), and the use of external message-related cues (Pornpitakpan, 2004). The above studies suggest that consumers more involved in an issue or product rely less on norms, conventions, and message-related cues. However, to the best of our knowledge, our study is the first to directly investigate the effect of product response self-relevance in online product communication. Specifically, we have demonstrated that consumer response to an online product offering is less affected by external, normative cues about the message (like attribute importance and source trustworthiness) when the response is more self-relevant (i.e., consumers consider a purchase or product everyday-life meaning is activated).

Our research supports the general suggestion provided by ELM (Ismagilova et al., 2021; Park & Kim, 2008; Petty & Cacioppo, 1984; Teng et al., 2014) that the peripheral route (related to cues) is more dominant when a person's involvement in an evaluated object is lower. Our model offers a specific mechanism of this effect, as we consider cues based on norms and conventions in the form of attribute-importance cues and source-trustworthiness cues. Noteworthy, the analytical information processing effect on the preference for descriptions based on important attributes (Study 1) was insignificant. This suggests that the peripheral route in that setting was more related to low product self-relevance than information processing. That distinction sheds a new, more nuanced light on the general ELM proposition that the role of the peripheral route may be diminished by involvement. Namely, involvement relates both to self-relevance and analytical information processing (Petty & Cacioppo, 1984). In fact, analytical information processing may enhance consumer reliance on attribute importance beliefs (Alba & Marmorstein, 1987; Ariely, 2000; Keller & McGill, 1994; Trzebiński & Marciniak, 2022).

6.2. Managerial implications

For online marketers, our results imply that providing consumers with message-related cues (e.g., about the importance of product attributes mentioned in an offering or about the source trustworthiness) should be more effective when consumers respond to the offering in a low-relevance situation (e.g., they merely evaluate an offer, with no reference to themselves, like before they consider their need to buy a product). Thus, it may be better to issue this type of communication, e.g., in places where consumers just browse the offer without any specific goal. For policymakers and consumers, on the other hand, our findings mean that consumers exposed to online offerings in those low-relevance situations should be especially vigilant with those message-related cues.

Lastly, for experimental researchers, our results suggest that manipulations using message-related cues (e.g., instructing participants that product information is important or trustworthy) may be more effective in low-self-relevance conditions, e.g., when participants are asked to merely evaluate a product, without considering to buy it for themselves.

6.3. Limitations and directions for further studies

Firstly, the negative effects of the response self-relevance on the effectiveness of message-related cues in e-commerce should be tested on other attributes and product categories (we have considered only several smartphone attributes) and consumer populations (we surveyed only Polish young adults). Next, it is worth studying the downstream effects of message-related cues that self-relevance may diminish, e.g., the impact of message trustworthiness cues on risk perception. Finally, one may investigate the proposed self-relevance effects through observation, e.g.,

eye-tracking. Such studies can check if consumers in high (vs. low) self-relevance conditions are less attentive to the parts of product descriptions that are communicated as more important or suggest high message trustworthiness.

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Notes

1. As we found slightly different proportion of gender in experimental groups ($\chi(3) = 6.690, p = .082$), we added gender as an ANOVA additional factor in this study.

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References

- Aarts, H., Verplanken, B., & Van Knippenberg, A. (1997). Habit and information use in travel mode choices. *Acta psychologica*, 96(1–2), 1–14. [https://doi.org/10.1016/S0001-6918\(97\)00008-5](https://doi.org/10.1016/S0001-6918(97)00008-5)
- Alalwan, A. A. (2018). Investigating the impact of social media advertising features on customer purchase intention. *International Journal of Information Management*, 42, 65–77. <https://doi.org/10.1016/j.ijim.2018.06.001>
- Alba, J. W., & Marmorstein, H. (1987). The effects of frequency knowledge on consumer decision making. *Journal of Consumer Research*, 14(1), 14–25. <https://doi.org/10.1086/209089>
- Ariely, D. (2000). Controlling the information flow: Effects on consumers' decision making and preferences. *Journal of Consumer Research*, 27(2), 233–248. <https://doi.org/10.1086/314322>
- Campbell, S. W., Wang, E. W., & Bayer, J. B. (2020). Mobiles and the self: A trajectory of paradigmatic change. In R. Ling, L. Fortunati, G. Goggin, S. S. Lim, & Y. Li (Eds.), *The Oxford handbook of mobile communication and society*. Oxford University Press. 42–53.
- Carbonell, G., Barbu, C. M., Vorgerd, L., Brand, M., & Molnar, A. (2019). The impact of emotionality and trust cues on the perceived trustworthiness of online reviews. *Cogent Business & Management*, 6(1), 1586062. <https://doi.org/10.1080/23311975.2019.1586062>
- Celsi, R. L., & Olson, J. C. (1988). The role of involvement in attention and comprehension processes. *Journal of Consumer Research*, 15(2), 210–224. <https://doi.org/10.1086/209158>
- Chen, X., & Davison, R. (2019). Self-awareness or context-awareness? The role of awareness in herd behavior. in: *Proceedings of 40th international conference on information systems, ICIS 2019*. Munich. Association for Information Systems.
- De Angelis, M., Tassiello, V., Amatulli, C., & Costabile, M. (2017). How language abstractness affects service referral persuasiveness. *Journal of Business Research*, 72, 119–126. <https://doi.org/10.1016/j.jbusres.2016.10.006>
- Drugău-Constantin, A. L. (2019). Is consumer cognition reducible to neurophysiological functioning? *Economics, Management, and Financial Markets*, 14(1), 9–15.
- Eisend, M., & Kuss, A. (2019). *Research methodology in marketing*. Springer International Publishing.
- Elliott, W. B., Rennekamp, K. M., & White, B. J. (2015). Does concrete language in disclosures increase willingness to invest? *Review of Accounting Studies*, 20(2), 839–865. <https://doi.org/10.1007/s11142-014-9315-6>
- Escalas, J. E. (2004). Narrative processing: Building consumer connections to brands. *Journal of Consumer Psychology*, 14(1–2), 168–180. https://doi.org/10.1207/s15327663jcp1401&2_19
- Ferguson, E., & Cox, T. (1993). Exploratory factor analysis: A users' guide. *International Journal of Selection and Assessment*, 1(2), 84–94. <https://doi.org/10.1111/j.1468-2389.1993.tb00092.x>
- Filieri, R., McLeay, F., Tsui, B., & Lin, Z. (2018). Consumer perceptions of information helpfulness and determinants of purchase intention in online consumer reviews of services. *Information & Management*, 55(8), 956–970. <https://doi.org/10.1016/j.im.2018.04.010>
- Ghazisaeedi, M., Steyn, P., & Heerden, G. V. (2012). Trustworthiness of product review blogs: A source trustworthiness scale validation. *African Journal of Business Management*, 6, 7498–7508.
- Glaser, M., & Reisinger, H. (2021). Don't lose your product in story translation: how product-story link in narrative advertisements increases persuasion. *Journal of Advertising*, 1–18. (ahead-of-print). <https://doi.org/10.1080/00913367.2021.1973623>
- Graessley, S., Horak, J., Kovacova, M., Valaskova, K., & Poliak, M. (2019). Consumer attitudes and behaviors in the technology-driven sharing economy: Motivations for participating in collaborative consumption. *Journal of Self-Governance and Management Economics*, 7(1), 25–30.
- Griffin, R. J., Neuwirth, K., Giese, J., & Dunwoody, S. (2002). Linking the heuristic-systematic model and depth of processing. *Communication Research*, 29(6), 705–732. <https://doi.org/10.1177/009365002237833>
- Hoffmann, J. A., von Helversen, B., & Rieskamp, J. (2013). Deliberation's blindsight: How cognitive load can improve judgments. *Psychological Science*, 24(6), 869–879. <https://doi.org/10.1177/0956797612463581>
- Houston, M. B., & Walker, B. A. (1996). Self-relevance and purchase goals: mapping a consumer decision. *Journal of the Academy of Marketing Science*, 24(3), 232–245. <https://doi.org/10.1177/0092070396243004>
- Ismagilova, E., Dwivedi, Y. K., & Rana, N. (2021). The Use of Elaboration Likelihood Model in eWOM Research: Literature review and weight-analysis. In *Conference on e-Business, e-Services and e-Society*. Springer, Cham.

- Ismagilova, E., Slade, E., Rana, N. P., & Dwivedi, Y. K. (2020). The effect of characteristics of source credibility on consumer behaviour: A meta-analysis. *Journal of Retailing and Consumer Services*, 53, 101736. <https://doi.org/10.1016/j.jretconser.2019.01.005>
- Jang, J. M., & Yoon, S. O. (2016). The effect of attribute-based and alternative-based processing on consumer choice in context. *Marketing Letters*, 27(3), 511–524. <https://doi.org/10.1007/s11002-014-9346-6>
- Karahanna, E., Straub, D. W., & Chervany, N. L. (1999). Information technology adoption across time: A cross-sectional comparison of pre-adoption and post-adoption beliefs. *MIS Quarterly*, 23(2), 183–213. <https://doi.org/10.2307/249751>
- Keller, P. A., & McGill, A. L. (1994). Differences in the relative influence of product attributes under alternative processing conditions: Attribute importance versus attribute ease of imaginability. *Journal of Consumer Psychology*, 3(1), 29–49. [https://doi.org/10.1016/S1057-7408\(08\)80027-7](https://doi.org/10.1016/S1057-7408(08)80027-7)
- Ketelaar, P. E., Willemsen, L. M., Sleven, L., & Kerkhof, P. (2015). The good, the bad, and the expert: How Consumer Expertise Affects Review Valence Effects On Purchase Intentions In Online Product Reviews. *Journal of Computer-Mediated Communication*, 20(6), 649–666. <https://doi.org/10.1111/jcc4.12139>
- Kuusela, H., & Paul, P. (2000). A comparison of concurrent and retrospective verbal protocol analysis. *American Journal of Psychology*, 113(3), 387–404. <https://doi.org/10.2307/1423365>
- Kwon, M., Adaval, R., Peracchio, L., Fischer, E., & Block, L. (2017). Going against the flow: The effects of dynamic sensorimotor experiences on consumer choice. *Journal of Consumer Research*, 44(6), 1358–1378. <https://doi.org/10.1093/jcr/ucx107>
- Lee, H. S., Sun, P. C., Chen, T. S., & Jhu, Y. J. (2015). The effects of avatar on trust and purchase intention of female online consumer: consumer knowledge as a moderator. *International Journal of Electronic Commerce Studies*, 6(1), 99–118. <https://doi.org/10.7903/ijecs.1395>
- Leung, K., & Morris, M. W. (2015). Values, schemas, and norms in the culture-behavior nexus: A situated dynamics framework. *Journal of International Business Studies*, 46(9), 1028–1050. <https://doi.org/10.1057/jibs.2014.66>
- Li, L., & Lin, T. T. (2019). Smartphones at work: A qualitative exploration of psychological antecedents and impacts of work-related smartphone dependency. *International Journal of Qualitative Methods*, 18, 1609406918822240. <https://doi.org/10.1177/1609406918822240>
- Lim, H., & Childs, M. (2020). Visual storytelling on Instagram: Branded photo narrative and the role of telepresence. *Journal of Research in Interactive Marketing*, 14(1), 33–50. <https://doi.org/10.1108/JRIM-09-2018-0115>
- Lunardo, R., & Rickard, B. (2019). How do consumers respond to fun wine labels? *British Food Journal*, 122(8), 2603–2619. <https://doi.org/10.1108/BFJ-04-2019-0286>
- Mackenzie, S. B. (1986). The role of attention in mediating the effect of advertising on attribute importance. *Journal of Consumer Research*, 13(2), 174–195. <https://doi.org/10.1086/209059>
- Mantel, S. P., & Kardes, F. R. (1999). The role of direction of comparison, attribute-based processing, and attitude-based processing in consumer preference. *Journal of Consumer Research*, 25(4), 335–352. <https://doi.org/10.1086/209543>
- Meilhan, D. (2019). Customer value co-creation behavior in the online platform economy. *Journal of Self-Governance and Management Economics*, 7(1), 19–24.
- Meyvis, T., & Janiszewski, C. (2002). Consumers' beliefs about product benefits: The effect of obviously irrelevant product information. *Journal of Consumer Research*, 28(4), 618–635. <https://doi.org/10.1086/338205>
- Miller, C. H., Lane, L. T., Deatrick, L. M., Young, A. M., & Potts, K. A. (2007). Psychological reactance and promotional health messages: The effects of controlling language, lexical concreteness, and the restoration of freedom. *Human Communication Research*, 33(2), 219–240. <https://doi.org/10.1111/j.1468-2958.2007.00297.x>
- Mirica, C. O. (2019). The behavioral economics of decision making: Explaining consumer choice in terms of neural events. *Economics, Management, and Financial Markets*, 14(1), 16–22.
- Park, D. H., & Kim, S. (2008). The effects of consumer knowledge on message processing of electronic word-of-mouth via online consumer reviews. *Electronic Commerce Research and Applications*, 7(4), 399–410. <https://doi.org/10.1016/j.elerap.2007.12.001>
- Petty, R. E., & Cacioppo, J. T. (1984). The effects of involvement on responses to argument quantity and quality: Central and peripheral routes to persuasion. *Journal of Personality and Social Psychology*, 46(1), 69. <https://doi.org/10.1037/0022-3514.46.1.69>
- Pornpitakpan, C. (2004). The persuasiveness of source credibility: A critical review of five decades' evidence. *Journal of Applied Social Psychology*, 34(2), 243–281. <https://doi.org/10.1111/j.1559-1816.2004.tb02547.x>
- Priester, J. R., & Petty, R. E. (1995). Source attributions and persuasion: perceived honesty as a determinant of message scrutiny. *Personality and Social Psychology Bulletin*, 21(6), 637–654. <https://doi.org/10.1177/0146167295216010>
- Priester, J. R., & Petty, R. E. (2003). The influence of spokesperson trustworthiness on message elaboration, attitude strength, and advertising effectiveness. *Journal of Consumer Psychology*, 13(4), 408–421. https://doi.org/10.1207/S15327663JCP1304_08
- Raimondo, M.A., Vernuccio, M. and Micelli, G.N. (2019), "The effects of native advertising on consumer responses. Some experimental evidences on the interaction between content type and brand awareness", *Mercati & Competitività*, Vol. 3, pp.149–168
- Roy, R. (2017). The effects of regulatory focus and mixed valence imagery and analytical attributes on product decisions. *Marketing Intelligence & Planning*, 35(3), 397–407. <https://doi.org/10.1108/MIP-04-2016-0068>
- Rydell, L., & Kucera, J. (2021). Cognitive attitudes, behavioral choices, and purchasing habits during the COVID-19 pandemic. *Journal of Self-Governance and Management Economics*, 9(4), 35–47.
- Scheibehenne, B., von Helversen, B., & Rieskamp, J. (2015). Different strategies for evaluating consumer products: Attribute- and exemplar-based approaches compared. *Journal of Economic Psychology*, 46, 39–50. <https://doi.org/10.1016/j.joep.2014.11.006>
- Schmeiser, S. (2014). Consumer inference and the regulation of consumer information. *International Journal of Industrial Organization*, 37, 192–200. <https://doi.org/10.1016/j.ijindorg.2014.09.004>
- Schultze, T., & Schulz-Hardt, S. S. (2015). The impact of biased information and corresponding meta-information on escalating commitment. *Journal of Economic Psychology*, 49, 108–119. <https://doi.org/10.1016/j.joep.2015.05.005>

- Shiv, B., & Fedorkhin, A. (1999). Heart and mind in conflict: the interplay of affect and cognition in consumer decision making. *Journal of Consumer Research*, 26(3), 278–292. <https://doi.org/10.1086/209563>
- Shiv, B., & Huber, J. (2000). The impact of Anticipating Satisfaction on Consumer Choice. *Journal of Consumer Research*, 27(2), 202–216. <https://doi.org/10.1086/314320>
- It should be: Feldman, J. M., & Lynch, J. G. (1988). Self-generated validity and other effects of measurement on belief, attitude, intention, and behavior. *Journal of applied Psychology*, 73(3), 421–435. <https://doi.org/10.1037/0021-9010.73.3.421>
- Simonson, I., & Nowlis, S. M. (2000). The role of explanations and need for uniqueness in consumer decision making: unconventional choices based on reasons. *Journal of Consumer Research*, 27(1), 49–68. <https://doi.org/10.1086/314308>
- Smerecnik, C. M., Mesters, I., Candel, M. J., De Vries, H., & De Vries, N. K. (2012). Risk perception and information processing: The development and validation of a questionnaire to assess self-reported information processing. *Risk Analysis: An International Journal*, 32(1), 54–66. <https://doi.org/10.1111/j.1539-6924.2011.01651.x>
- Snelders, D., & Schoormans, J. P. (2004). An exploratory study of the relation between concrete and abstract product attributes. *Journal of Economic Psychology*, 25(6), 803–820. <https://doi.org/10.1016/j.joep.2003.08.004>
- Sperber, D., & Wilson, D. (1996). *Relevance: Communication and cognition*. Blackwell.
- Sugathan, P., & Ranjan, K. R. (2020). When co-production fails: The role of customer's internal attributions and impression management concerns. *Journal of Business Research*, 121, 535–548. <https://doi.org/10.1016/j.jbusres.2020.02.03>
- Sun, Y., Yang, C., Shen, X. L., & Wang, N. (2020). When digitalized customers meet digitalized services: A digitalized social cognitive perspective of omnichannel service usage. *International Journal of Information Management*, 54, 102200. <https://doi.org/10.1016/j.ijinfomgt.2020.102200>
- Tao, Q., & Xu, Y. (2018). Consumer Adoption of Fashion Subscription Retailing: The Moderating Effect of Experiment with Appearance. *International Textile and Apparel Association (ITAA) Annual Conference Proceedings* Cleveland, OH. Iowa State University Digital Press. 62.
- Teas, R. K. (1993). Expectations, performance evaluation, and consumers' perceptions of quality. *Journal of Marketing*, 57(4), 18–34.
- Teng, S., Khong, K. W., & Goh, W. W. (2014). Conceptualizing persuasive messages using ELM in social media. *Journal of Internet Commerce*, 13(1), 65–87. <https://doi.org/10.1080/15332861.2014.910729>
- Trzebiński, W., Doroszewicz, S., & Marciniak, B. (2021). Is it worth focusing on product details? How consumers use abstract product information in direct response to product alternatives. *WSEAS Transactions on Business and Economics*, 18, 659–670. <https://doi.org/10.37394/23207.2021.18.65>
- Trzebiński, W., & Marciniak, B. (2022). Meaning or importance? E-commerce consumers interest in product features presented in online offerings: The role of self-relevance and information processing. *Journal of Internet Commerce* (accepted manuscript, ahead-of-print) <https://doi.org/10.1080/15332861.2022.2042116>
- van Ginkel Bieshaar, M. (2012). The Impact of Abstract Versus Concrete Product Communications on Consumer Decision-making Processes. In *ERIM Ph.D. Series Research in Management*. Erasmus Research Institute of Management.
- Vătămănescu, E. M., Dabija, D. C., Gazzola, P., Cegarro-Navarro, J. G., & Buzzi, T. (2021). Before and after the outbreak of covid-19: Linking fashion companies' corporate social responsibility approach to consumers' demand for sustainable products. *Journal of Cleaner Production*, 321, 128945. <https://doi.org/10.1016/j.jclepro.2021.128945>
- Wang, S., Beatty, S. E., & Foxx, W. (2004). Signaling the trustworthiness of small online retailers. *Journal of Interactive Marketing*, 18(1), 53–69. <https://doi.org/10.1002/dir.10071>
- Wang, Z., Lu, Y., Ran, L., & Yang, D. (2022a). Multichannel retailers' prominent attribute and product positioning strategies. *International Journal of Retail & Distribution Management*. (ahead-of-print). <https://doi.org/10.1108/IJRDM-10-2020-0424>
- Wang, J., Zhang, X., & Jiang, J. (2022b). Healthy-Angular, unhealthy-circular: Effects of the fit between shapes and healthiness on consumer food preferences. *Journal of Business Research*, 139, 740–750. <https://doi.org/10.1016/j.jbusres.2021.10.012>
- Watson, R., & Popescu, G. H. (2021). Will the COVID-19 Pandemic Lead to Long-Term Consumer Perceptions, Behavioral Intentions, and Acquisition Decisions? *Economics, Management and Financial Markets*, 16(4), 70–83.
- Whitley, S. C., Trudel, R., & Kurt, D. (2018). The Influence of Purchase Motivation on Perceived Preference Uniqueness and Assortment Size Choice. *Journal of Consumer Research*, 45(4), 710–724. <https://doi.org/10.1093/jcr/ucy031>
- Wu, L., Chiu, M. L., & Chen, K. W. (2020). Defining the determinants of online impulse buying through a shopping process of integrating perceived risk, expectation-confirmation model, and flow theory issues. *International Journal of Information Management*, 52, 102099. <https://doi.org/10.1016/j.ijinfomgt.2020.102099>

APPENDIX A - SAMPLE CHARACTERISTICS (FREQUENCIES)

Study 1

	Product self-relevance condition		Information processing condition	
	High	Low	Analytical	Automatic
Gender				
Women	64	48	62	50
Man	56	54	58	52
Age				
<20	2	1	2	1
20-25	110	96	110	96
26-30	8	5	8	5
Working				
Yes	79	58	85	52
No	41	44	35	50

Study 2

	Product self-relevance condition		Communicated attribute-importance cuescondition	
	High	Low	Present	Absent
Gender				
Women	35	35	35	35
Man	52	52	56	48
Age				
<20	3	6	3	6
20-25	79	75	83	71
26-30	5	6	5	6
Working				
Yes	56	51	55	52
No	31	36	36	31

Study 3

	Product self-relevance condition		Communicated source-trustworthiness cues condition	
	High	Low	Present	Absent
Gender				
Women	24	23	27	20
Man	13	19	15	17
Age				
20-25	33	38	37	34
26-30	4	4	4	3
Working				
Yes	23	30	24	29
No	14	12	18	8

APPENDIX B—DESCRIPTIVES FOR MEASUREMENT ITEMS

Stu-dy	Measure-ment	Coding	Item	Mean	SD	Relia-bility	Reference
1	Self-relevance of response to a product	from 1 to 5; the higher value means the higher self-relevance; semantic differential	You would choose a smartphone: not thinking about yourself (1)—thinking about yourself (5) Choosing a smartphone: would not be personally related to you (1)—would be personally related to you (5) Your decision: would not bear any consequence for you (1)—would constantly affect you (5) Your decision: would not be related to you (1)—would be directly related to you (5) Choosing a smartphone: would be unimportant for you (1) -would be important for you (5) Choosing a smartphone: would not mean anything to you (1)—would mean a lot to you (2)	4.144 4.005 3.721 3.923 3.842 3.599	1.023 1.009 1.127 1.096 1.001 1.010	$\alpha = .884$	partially adapted from Houston and Walker (1996)

(Continued)

(Continued)

Stu-dy	Measure-ment	Coding	Item	Mean	SD	Relia-bility	Reference
			You would not care ... (1)—you would care ... (5) ... about choosing a smartphone	3.662	.969		
			Choosing a smartphone: would not be significant to you (1)—would be significant to you (5)	3.581	1.020		
	Analytical information processing	from 1 (totally disagree) to 5 (totally agree); the higher value means the higher self-relevance	I responded very carefully.	4.284	.838	$\alpha = .803$	adapted from Griffin et al., 2002) and Smerecnik et al. (2012)
			Before I responded, I had spent a lot of time on deliberation.	2.986	1.119		
			I considered my responses in detail.	3.514	1.071		
			I paid a lot of attention to think my responses through.	3.392	1.123		
2	Self-relevance of response to a product	from 1 to 5; the higher value means the higher self-relevance; semantic differential	You would choose a smartphone: not thinking about yourself (1)—thinking about yourself (5)	4.121	1.098	$\alpha = .862$	partially adapted from Houston and Walker (1996)

(Continued)

(Continued)

Stu-dy	Measurement	Coding	Item	Mean	SD	Relia-bility	Reference
			Choosing a smartphone: would not be personally related to you (1)—would be personally related to you (5)	3.874	1.018		
			Your decision: would not bear any consequence for you (1)—would constantly affect you (5)	3.477	1.191		
			Your decision: would not be related to you (1)—would be directly related to you (5)	3.833	1.138		
			Choosing a smartphone: would be unimportant for you (1) -would be important for you (5)	3.626	1.140		
			Choosing a smartphone: would not mean anything to you (1)—would mean a lot to you (2)	3.374	1.016		
			You would not care ... (1)—you would care ... (5) ... about choosing a smartphone	3.489	1.030		

(Continued)

(Continued)

Stu-dy	Measurement	Coding	Item	Mean	SD	Relia-bility	Reference
			Your decision: would not have any impact on things that are important in your life (1)—would have some impact on things that are important in your life (5)	3.218	1.197		
			Your decision: would not matter for anything you want to do in your life (1)—would matter for some things you want to do in your life (5)	3.172	1.237		
			Your decision: would not support attaining anything that matters in your life (1)—would support attaining something that matters in your life (5)	3.218	1.101		



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