Is it better to communicate product information abstractly or concretely? The role of consumer product expertise and shopping-stage mindset

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Abstract

Purpose – This paper aims to investigate the effect of product-related description abstractness/concreteness on perceived trustworthiness and the role of consumer product expertise and shopping-stage mindset in the persuasiveness of abstract vs concrete product descriptions.

Design/methodology/approach – Two online experiments were conducted: Study 1 (description abstractness – manipulated between-subject; consumer product expertise, perceived trustworthiness, purchase intent – measured), Study 2 (consumer shopping-stage mindset – manipulated between-subject; description abstractness – manipulated within-subject; consumer product expertise, perceived trustworthiness, abstract/concrete description preference – measured).

Findings – The negative effect of the abstractness (abstract descriptions vs the ones supplemented with relevant product details) on description trustworthiness was evidenced in Study 1. Trustworthiness was positively related to purchase intent, especially for high product expertise. Study 2 replicated the effect of product description abstractness on its trustworthiness in terms of two other forms of abstractness (abstract descriptions vs the ones supplemented with irrelevant product details and product benefits vs attributes). The goal-oriented (vs comparative) mindset had a positive effect on the benefit (vs attribute) description preference, especially for high product expertise.

Practical implications – For marketers, the results suggest the positive consequences of presenting concrete information on product attributes and the conditions enhancing the effectiveness of presenting product benefits.

Originality/value – The paper integrates the existing views on consumer response to abstract vs concrete information (lexical abstractness/concreteness, means-end chain theory) and links them to consumer product expertise and shopping-stage mindset.

Keywords Trust, Consumer behavior, Expertise, Abstract/concrete product descriptions, Benefits vs attributes, Consumer mindsets, Product communication

Paper type Research paper

Introduction

Whether to communicate products using abstract language (e.g. through product benefits or more abstract attributes) or concrete language (e.g. through more concrete product attributes) is one of the key marketing dilemmas (Hernandez *et al.*, 2015). The level of abstractness of a product description may influence consumer response, including the description's perceived trustworthiness and persuasiveness (Bartikowski and Berens, 2021; Connors *et al.*, 2021; Denizci Guillet *et al.*, 2022; Elliott *et al.*, 2015; Graeff, 1997; Hernandez *et al.*, 2015; Hu and Winter, 2019; Lee *et al.*, 2021; Maheswaran and Sternthal, 1990; Miller *et al.*, 2007; Raimondo *et al.*, 2019; Topcuoglu *et al.*, 2022; Wang and Lehto, 2020; Xu *et al.*, 2021). The present research aims to address two substantial gaps related to the consequences of product description abstractness.

The first gap pertains to the *perceived trustworthiness* of abstract vs concrete product descriptions. Information abstractness can be analyzed through the lexical perspective (Feldman *et al.*, 2006). That is, a concrete (vs abstract) message is defined as evoking vivid images of some reality (e.g. "engine quivers" vs "engine reacts," Burns *et al.*, 1993). Lexically abstract (vs concrete) information is typically perceived as less trustworthy (Burns *et al.*, 1993; Kim and Magnini, 2020; Miller *et al.*, 2007; Pérez *et al.*, 2020; Robinson and Eilert, 2018). The lexical approach has improved understanding of how abstract (vs concrete) information affects the message perception, but it does not relate to a product *per se*. Namely, lexical concreteness (vs abstractness) does not necessarily mean describing the product using its more detailed features (e.g. presenting product attributes instead of benefits). To bridge this gap, the current paper investigates the effect of the *product-related* abstractness/concreteness of product descriptions on the perceived description trustworthiness.

In line with the means-end chain theory (Chen *et al.*, 2020; Gutman, 1982; Heinze *et al.*, 2017; Lin *et al.*, 2019; Lin and Fu, 2018; Liu *et al.*, 2022; Ratakam and Petison, 2022), product-related information concreteness is defined as the degree to which the information directly and tangibly describes a product (Houston and Walker, 1996). It is proposed that product description trustworthiness can be increased by concretizing the product descriptions with both relevant and irrelevant product details and by presenting product attributes instead of benefits. This way, the current paper extends the lexical-based research by examining the positive effect of product-related concretization on perceived trustworthiness.

The second gap pertains to the *persuasiveness* of the abstract vs concrete product descriptions. The related literature does not provide a sufficient understanding of the role of two important constructs: the consumer shopping-stage mindset (Wyer, 2018), which is related to evoking more or less abstract product information by consumers (Lee and Ariely, 2006; van Ginkel Bieshaar, 2012), and consumer product expertise (Chen *et al.*, 2020). Specifically, there is no direct evidence for the relationship between the persuasiveness of abstract/concrete product descriptions and the consumer shopping-stage mindset, and the evidence for the role of consumer product expertise is ambiguous. For example, more concrete (vs abstract) product descriptions were found to be both more persuasive (Graeff, 1997; Maheswaran and Sternthal, 1990) and less persuasive (Raimondo *et al.*, 2019) for more knowledgeable consumers. The current research addresses these gaps by investigating the role of the shopping-stage mindset and consumer product expertise in the persuasiveness of abstract vs. concrete product descriptions.

Drawing on consumer expertise literature (Chen *et al.*, 2020; Clarkson *et al.*, 2013; Filieri, 2016; Park and Kim, 2008), it is proposed that consumer product expertise enhances the positive effect of concretizing product descriptions (specifically: by adding relevant product details) on purchase intent. Consumer product expertise is also proposed to enhance the positive effect of the goal-oriented mindset (related to early shopping stages) on consumer preference for more abstract (specifically: benefit-based) product descriptions. This way, the current paper extends the existing research on the persuasiveness of abstract/concrete product information by

offering new insights into the role of consumer product expertise and shopping-stage mindset.

From the managerial perspective, the current results advise marketers on when to present their products more detailedly by adding relevant or irrelevant product information and focusing on product attributes vs benefits – depending on consumer product expertise and the shopping stage.

Hypothesis development

Perceived trustworthiness of abstract vs concrete product descriptions

Lexical concreteness of textual communication is defined as the degree to which the words provide vivid, detailed information about described objects, actions, situations and context (Feldman *et al.*, 2006). A more lexically abstract message may elicit adverse reactions, being perceived as less objective and truthful (Feldman *et al.*, 2006), less authentic, less associated with reality (Pérez *et al.*, 2020), less vivid (Burns *et al.*, 1993; Walters *et al.*, 2012) and indicating inferior perception of warmth and competence (Kim and Magnini, 2020). Such a message would also be considered less trustworthy (Miller *et al.*, 2007; Robinson and Eilert, 2018). In line with the above, in the case of online reviews, consumers exhibit a more positive attitude toward reviewers when their reviews are more concrete (Aerts *et al.*, 2017) and perceive those reviews as more authentic (Kim and Han, 2022). Likewise, more concrete tweets were more likely to be retweeted (Saini *et al.*, 2022).

While the above studies focus on lexical concreteness, the current research builds on the product-related conceptualization of information abstractness vs concreteness, stemming from the means-end chain theory (Chen *et al.*, 2020; Gutman, 1982; Heinze *et al.*, 2017; Lin *et al.*, 2019; Lin and Fu, 2018; Liu *et al.*, 2022; Ratakam and Petison, 2022), according to which the product-related information is more abstract (vs concrete) when it is less directly related to the product (Houston and Walker, 1996; Johnson, 1989). This approach differs from lexical concreteness, which focuses on language vividness regardless of what objects or reality are described. For example, the product-related concreteness of product information is higher when it includes details about a product, even if they do not contribute to vivid language characterizing lexically concrete information. On the other hand, a vivid description of product benefits (i.e. how consumers may use a product) makes the message more lexically concrete, but it does not contribute to the product-related concreteness as the benefits are not directly related to the product itself.

It is proposed that the positive effect of concrete information on its perceived trustworthiness, demonstrated in the case of lexical concreteness (Miller *et al.*, 2007; Robinson and Eilert, 2018), extends to product description concretization. Abstract product information may be concretized in various ways. In this paper, three forms of such concretization are considered as each of them may evoke different consumer responses.

The first and perhaps the most apparent form of concretization is supplementing the abstract product description with *relevant* details about a product, i.e. those perceived by consumers as informative and related to their desires (Meyvis and Janiszewski, 2002). For example,

headphones can be described abstractly as "comfortable." That description may be supported with more concrete information about the shape ("comfortable thanks to their shape"). It is proposed that adding such relevant details directly related to a product improves the message's perceived trustworthiness since it makes the product description more concrete (Feldman *et al.*, 2006; Miller *et al.*, 2007; Robinson and Eilert, 2018). It may happen even if the concretizing relevant product information (e.g. "shape") has a similar level of lexical concreteness compared to the corresponding abstract product information ("comfortable"). That is, the word "shape" may be considered as not more vivid than the word "comfortable," while the former description brings more details about the product itself.

The second form of concretization supplements the abstract description with more concrete product details, albeit *irrelevant*, i.e. perceived by consumers as uninformative and unrelated to their desires (Meyvis and Janiszewski, 2002; Wang *et al.*, 2018). For example, a smartphone may be described abstractly as "reliable," which may be concretized just by narrowing the scope of that attribute ("reliable in terms of electronic systems"). Electronic systems are typical components of smartphones, so this concretization provides no substantial information to the abstract description. Mentioning additional, irrelevant product attributes may weaken product evaluation (Meyvis and Janiszewski, 2002), as consumers may perceive it as suggesting the product is less beneficial. In the current research, it is proposed, however, that adding irrelevant details may improve the message's perceived trustworthiness because the product description becomes more directly related to a product (i.e. more concrete) (Feldman *et al.*, 2006; Miller *et al.*, 2007; Robinson and Eilert, 2018). Again, it may happen even if the concretizing irrelevant product information (e.g. "electronic systems") has a similar level of lexical concreteness as the corresponding abstract product information ("reliability"). That is, the word "electronic systems" may be considered as not more vivid than the word "reliable," while the former description brings more details about the product itself.

Third, presenting product attributes vs corresponding benefits is another form of a product description's concretization (Hernandez *et al.*, 2015). For example, consumers may perceive a laptop as having high video quality (an attribute) and believe it enables the laptop to provide entertainment (a benefit). The attribute and the benefit may refer to the same product use, but the respective product descriptions (i.e. benefit-based and attribute-based) would differ in product-related abstractness. Benefits refer to product usage, and attributes refer to the product itself. Such attribute-based (vs benefit-based) descriptions are more directly related to products, i.e. they provide more concrete information about the product. Consequently, those more concrete, attribute-based descriptions may be perceived as more trustworthy (Feldman *et al.*, 2006; Miller *et al.*, 2007; Robinson and Eilert, 2018). Noteworthily, both descriptions may show a similar level of lexical concreteness. That is, the words "video quality" and "entertainment" may be considered equally vivid. Put together, it is hypothesized that:

H1. Consumers perceive concrete product descriptions as more trustworthy than abstract product descriptions in the following settings:

H1a. The concrete product description is formed from the abstract one by adding *relevant* details about a product.

H1b. The concrete product description is formed from the abstract one by adding *irrelevant* details about a product.

H1c. The concrete product description is based on product attributes, and the abstract product description is based on product benefits.

The persuasiveness of abstract vs concrete product descriptions

Purchase intent and the role of consumer product expertise

Trustworthiness is a key component of credibility (Lemanski and Lee, 2012; Lui and Standing, 1989; McGinnies and Ward, 1980; Wang and Scheinbaum, 2018; Wiedmann and von Mettenheim, 2020), which refers to the audience's belief that the provided statements are valid (Pornpitakpan, 2004). Messages having high perceived source credibility are typically more persuasive (Pornpitakpan, 2004), evoking a more positive brand attitude (Wu and Wang, 2011) and increasing consumer purchase intent (Eberhardt *et al.*, 2020; Priester and Petty, 2003; Weismueller *et al.*, 2020). Importantly, however, the validity of product information requires the information to be relevant, i.e. perceived by consumers as informative and related to consumer desires (Meyvis and Janiszewski, 2002). Consequently, it is proposed that concretizing a product description by supplementing the abstract information with *relevant* details about a product increases purchase intent through perceived description trustworthiness. Formally:

H2a. The purchase intent is higher when an abstract product description is concretized by adding *relevant* details about a product.

H2b. The effect of a product description's concretization (by adding *relevant* product details) on purchase intent (*H2a*) is mediated by perceived description trustworthiness.

Consumer product expertise is a consumer's ability to organize and evaluate product information, e.g. isolating which information is important and relevant (Alba and Hutchinson, 1987; Mason and Bequette, 1998). Consumer product expertise (vs the more general concept of product knowledge) is considered more applicable to consumer attitudes toward product information (Thompson *et al.*, 2005). The expertise may influence consumer decision-making and alter consumer response to product information (Duhan *et al.*, 2019; Ketelaar *et al.*, 2015; Reichelt *et al.*, 2014; Szopiński *et al.*, 2020). There is inconsistent empirical evidence regarding the relationship between consumer expertise and response to abstract vs concrete product descriptions. Product expertise was related to the higher persuasiveness of concrete information (Graeff, 1997; Maheswaran and Sternthal, 1990), as knowledgeable consumers might make more connections between product

details and benefits. Contrary, more abstract information was more persuasive for consumers with higher brand awareness (Raimondo *et al.*, 2019), as broader knowledge might make the abstract product-related concepts easier to process.

The current research proposes a more nuanced role of consumer expertise in the persuasiveness of abstract/concrete product information. The expertise may moderate the trustworthiness-related mechanism of the abstractness/ concreteness effect on purchase intent. Consumers with higher product expertise (vs novices) may prefer a different type of product information consistent with their information processing strategy (Park and Kim, 2008). Particularly, assessing the trustworthiness of the product information may be easier for high-expertise consumers. For example, experienced (vs inexperienced) readers were more confident in spotting untrustworthy reviews (Filieri, 2016). High-expertise consumers better assess information relevance, thus being more likely to use this assessment in their decision-making processes (Selnes and Howell, 1999). This way, consumer product expertise may make consumers more confident about their trustworthiness perceptions and, consequently, more rely on those perceptions when responding to a product description. Product expertise may, then, enhance the positive influence of description trustworthiness on purchase intent. Accordingly, it is expected that:

H3a. The effect of perceived description trustworthiness on purchase intent is more positive for consumers with high (vs low) levels of product expertise.

H3b. The indirect effect of concretizing product descriptions (by adding relevant product details) on purchase intent through perceived trustworthiness (*H2b*) is more positive for consumers with high (vs low) levels of product expertise.

Consumer preference and the role of shopping-stage mindset and product expertise

Consumer behavior toward products may involve at least two consecutive phases (Lee and Ariely, 2006; van Ginkel Bieshaar, 2012). The first phase is more related to consumer desires and goals (i.e. goal-oriented mindset), while in the second phase, consumers are more focused on product choice (i.e. comparative mindset). In the goal-oriented mindset, consumers may evoke more abstract terms when processing information on products (Lee and Ariely, 2006).

According to the means-end chain theory, product benefits (vs attributes) are closer to personal consumer values within the structure of consumer product knowledge (Chen *et al.*, 2020; Gutman, 1982; Heinze *et al.*, 2017; Johnson, 1989; Lin *et al.*, 2019; Lin and Fu, 2018; Liu *et al.*, 2022; Ratakam and Petison, 2022). Consumers in the goal-oriented (vs comparative) mindset, as more focused on their goals, may consider more the related personal values that can be achieved with a product category. In this case, the consumers' knowledge of product benefits may be more activated. Consumers exposed to an abstract, benefit-based message (e.g. health consequences of food) mentioned more goals than those exposed to the same abstract information concretized with examples of product alternatives (van Ginkel Bieshaar, 2012). This suggests that

receiving more abstract, benefit-based messages leads to goal activation. In turn, in the case of the goal-oriented mindset, benefit-based descriptions may better resonate with consumers' temporally activated knowledge, attracting their attention and interest. It is then proposed that in the goal-oriented (vs comparative) mindset, benefit-based product descriptions, as more connected to consumer goals than attribute-based descriptions, should be more preferred by consumers. Formally:

H4. Consumers in the goal-oriented (vs comparative) mindset show a higher preference for benefit-based (vs attribute-based) product descriptions.

The means-end chain theory posits that when consumers develop their product knowledge, they organize information related to a product throughout the continuum from product concrete attributes to personal values achieved by using a product (Chen *et al.*, 2020; Gutman, 1982; Johnson, 1989). Consequently, the effect of the consumer shopping-stage mindset on benefit-based (vs attribute-based) information preference may be moderated by consumer product expertise.

When high-expertise (vs low-expertise) consumers think about a product category in the context of their goals (goal-oriented mindset), they have larger informational resources and more ability to link their personal values with the use of products (Bruwer *et al.*, 2017). In line with this notion, in the case of higher brand awareness, benefit-based ads were more persuasive, possibly because benefit-based information was easier to process when consumers are more experienced or familiar with the brand (Raimondo *et al.*, 2019). Consequently, in the goal-oriented mindset, high-expertise (vs low-expertise) consumers may be more capable of connecting goals and product benefits.

Consumers more knowledgeable about a product category also have more information about product details or technical attributes (Clarkson *et al.*, 2013). In line with this, more concrete product descriptions were more persuasive for more knowledgeable consumers (Graeff, 1997; Maheswaran and Sternthal, 1990). Likewise, consumers experienced with a product category typically use a higher number of the product attributes when evaluating a product (Golder *et al.*, 2012), recognize a higher number of important product attributes (Viot, 2012), and develop better mental simulations of new products (Nielsen *et al.*, 2018). Consequently, when focusing on choosing products in the comparative mindset, high-expertise (vs low-expertise) consumers may be more capable of activating product attribute information.

In sum, high product expertise may enable consumers to adapt their reaction to product descriptions to their mindsets representing a current shopping stage. In the goal-oriented mindset, during the earlier shopping stages, high- (vs low-) expertise consumers may better use their knowledge about product benefits, being more sensitive to benefit-based arguments. In the comparative mindset, during the later shopping stages, high- (vs low-) expertise consumers may better switch to their knowledge about product attributes, which makes attribute-based descriptions more resonating. It is then proposed that consumer product knowledge makes the effect of the goal-oriented (vs comparative) mindset on the

preference for benefit-based (vs attribute-based) descriptions more positive. Accordingly, it is expected that:

H5. The effect of consumer goal-oriented (vs comparative) mindset on benefit-based (vs attribute-based) description preference (*H4*) is more positive for consumers with high (vs low) levels of product expertise.

Two experiments (Study 1 and Study 2) aimed to test the hypotheses. Specifically, Study 1, pertaining to the concretization with *relevant* product details, tested *H1a*, *H2* and *H3*. Two other forms of concretization (with *irrelevant* product details and by presenting product attributes vs benefits) were studied in Study 2, which tested *H1b-c*, *H4* and *H5*.

Study 1

Study 1 pertains to the concretization of abstract product descriptions by supplementing them with *relevant* details about the presented products. Three hypotheses were tested: *H1a* (predicting that perceived message trustworthiness is higher for the concretized descriptions formed from the abstract ones by adding *relevant* details about products), *H2* (predicting the higher purchase intent for the concretized descriptions, and the mediating role of message trustworthiness) and *H3* (predicting that perceived trustworthiness of product information has a more positive effect on purchase intent when product expertise levels are higher).

Procedure

The study included 188 participants (54% female; M_{age} = 32.15, SD = 10.59; power analysis [G*Power®] for β = 0.80, α = 0.05; linear regression with five predictors, f^2 = 0.15: N_{min} = 55) enrolled in exchange for extra course points. The participants were undergraduate and graduate students of business programs. The participants' data have been anonymized, and their appropriate consent has been obtained. To increase external validity, the study uses three different products that were presented to the participants: protein bars, headphones and laptops.

The participants were randomly assigned between two types of product descriptions (abstract vs concretized). The abstract descriptions consisted merely of the abstract information about a product (e.g. "comfortable"). The concretized product descriptions consisted of abstract product information supplemented with *relevant* details about the products (e.g. "comfortable thanks to the shape of the headphones"). Importantly, the terms added into the concretized condition (like "shape") were designed to be not more vivid than those constituting the abstract condition (like "comfortable"). This way, the two conditions differ in product-related abstractness rather than lexical abstractness. The relevance of detailed information was emphasized in the stimuli by using the phrase "thanks to." See the complete stimuli product descriptions in Appendix 1.

A between-subject design was used, i.e. only one description type (concretized or abstract) was presented to a participant. The aim was to avoid the "trivial" comparison of product alternatives. As the abstract descriptions were simply the reduced versions of the concretized ones, the latter might be perceived as obviously stronger arguments. The product descriptions were based on three features for each product

alternative because it was found in the pretest that the subjects perceived the task of evaluating an alternative based on a single feature as unrealistic, and they felt insufficiently informed to make a decision.

After reading the stimuli descriptions, the participants rated the perceived description trustworthiness and reported their product expertise. The questionnaire ended with demographics.

Measurements

To measure purchase intent (separately for each product), the question "What is the likelihood that you would consider buying this product?" (1 = very unlikely, 7 = very likely) was used, following Hardesty *et al.* (2002) and Petrova and Cialdini (2005). The perceived description trustworthiness of all presented product descriptions was measured using a four-item, seven-point semantic differential adapted from Ghazisaeedi *et al.* (2012), α = 0.85. Product expertise was measured separately for food (α = 0.95) and technology products (α = 0.94) with a three-item, seven-point scale proposed by Lambert-Pandraud *et al.* (2005). For all the above variables, the measurement items were pooled into single indices. See Appendix 2 for details about the measurements.

Results

The purchase intent and perceived trustworthiness were averaged for all three products. A similar approach was used in other studies on attribute-based decision-making (Lu *et al.*, 2016). Mediation analysis has been conducted (PROCESS macro, Hayes (2017), Model 4) with description type (abstract descriptions coded as 0 and concretized descriptions [formed from the abstract one by adding *relevant* details about a product] coded as 1) as an independent variable, perceived description trustworthiness as a mediator and purchase intent as a dependent variable. Concretized (vs abstract) descriptions have a positive effect on the perceived description trustworthiness (b = 0.47, p = 0.001, $M_{abstract}$ = 3.17, $SD_{abstract}$ = 1.08, $M_{concretized}$ = 3.64, $SD_{concretized}$ = 0.87), supporting *H1a*. In line with *H2a*, a positive total effect on the purchase intent occurred (b = 0.50, p = 0.01, $M_{abstract}$ = 4.58, $SD_{abstract}$ = 1.62, $M_{concretized}$ = 5.12, $SD_{concretized}$ = 1.23). The effect of description trustworthiness on purchase intent was positive (b = 1.23, $p < 0.001$), while the direct effect of description type on purchase intent was nonsignificant ($p > 0.7$). Crucially, the indirect effect of description type on purchase intent through description trustworthiness is positive (b = 0.53; 95% confidence interval (CI), lower limit confidence interval (LLCI) = 0.22, upper limit confidence interval (ULCI) = 0.86), supporting full mediation in line with *H2b*.

A separate analysis for each of two product categories (i.e. food = represented by protein bars, and technology products – represented by headphones and laptops) was conducted to assess the moderating effect of product expertise on the relationship between perceived trustworthiness and purchase intent. The rationale is that participants might have different levels of expertise regarding food and technology. Description type (abstract vs concretized formed from the abstract one by adding *relevant* details about a product) served as an independent variable. Perceived trustworthiness was a mediator, and purchase intent was a dependent variable.

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Consumer product expertise served as a continuous moderator of the relationship between the mediator (trustworthiness) and the dependent variable (purchase intent). The analysis was conducted via PROCESS macro (Model 14) (Hayes, 2017).

For food, the regression analysis showed a positive effect of description trustworthiness on purchase intent ($b = 0.80$, $p < 0.001$). The interaction effect of description trustworthiness and food product expertise was significant ($b = 0.40$, $p < 0.001$). In line with *H3a*, the positive effect of description trustworthiness was significant for participants with food product expertise equal to or above the cutoff value of 1.9 in the Johnson–Neyman analysis. The positive conditional effects of description trustworthiness were stronger for the higher product expertise ($-1SD$: $b = 0.34$, $p = 0.01$; mean: $b = 0.80$, $p < 0.001$; $+1SD$: $b = 1.25$, $p < 0.001$). The index of moderated mediation was positive ($b = 0.19$; 95% CI, LLCI = 0.06, ULCI = 0.34), supporting *H3b*.

For technology products, the moderating role of consumer technology product expertise in the relationship between perceived description trustworthiness and purchase intent (averaged across two technology products, i.e. headphones and a laptop) was assessed similarly. The moderation was not supported, as the interaction effect of description trustworthiness and technology product expertise was nonsignificant ($p > 0.4$).

Discussion

Study 1 results suggest that concretizing product descriptions by supplementing the abstract information with relevant product details (keeping a similar level of lexical concreteness) leads to higher perceived description trustworthiness and, in turn, to higher purchase intent. The findings of this study evidence that this mechanism may be enhanced by product expertise, as the latter may make consumers more sensitive to perceived description trustworthiness. Nevertheless, this moderating role may be limited to specific product categories (e.g. food products but not technology products).

Study 2

This study pertains to the two remaining forms of concretizing abstract product descriptions, i.e. supplementing the abstract descriptions with *irrelevant* details about a product and presenting product attributes vs benefits. Study 2 aimed to replicate the evidence regarding *H1* provided by Study 1, using those two forms of concretization (to test *H1b* and *H1c*, respectively). Study 2 also aimed to investigate the influence of consumer shopping-stage mindset (goal-oriented vs comparative) on the preference for benefit-based (vs attribute-based) product descriptions (*H4*) and the moderating role of consumer product expertise (*H5*).

Procedure

Two hundred five students (51.1% females, $M_{age} = 22.1$, $SD_{age} = 1.71$; power analysis (G*Power®) for $\beta = 0.80$, $\alpha = 0.05$; comparison of two dependent means, $d_z = 0.5$: $N_{min} = 34$; 2×2 analysis of variance (ANOVA), $f = 0.25$: $N_{min} = 128$) participated in an online study, recruited by marketing undergraduate students for course credits (like Glaser and Reisinger, 2021). The participants' data have been

anonymized, and appropriate consent has been obtained. The participants were asked to imagine they were going to buy a new smartphone for themselves, and to this end, they would browse a website.

The participants were randomly split according to a 2 (shopping-stage mindset: goal-oriented vs comparative) $\times$ 2 (message source type: consumer organization vs e-commerce) between-subject design. The message source type manipulation aimed to check whether the hypothesized relationships depend on the type of website providing product descriptions. Unlike Study 1 and most previous studies on the topic (Hernandez *et al.*, 2015), the product description abstractness/concreteness was involved as a within-subject factor to increase the realism of the purchase situation, as consumers typically choose from a set of available product options. Accordingly, numerous studies involved various product description types within-subject, measuring consumer preference (Li and Cao, 2020; Wang *et al.*, 2022).

In the goal-oriented mindset condition, the participants were asked to think about what a smartphone may give them. To this end, participants read a list of 13 selected personal values (e.g. safety, calmness, beauty) based on Rokeach's list (Kahle *et al.*, 1986). The original set of Rokeach's values was pretested in two focus group interviews using the study population of university students. The focus group participants considered the selected 13 values as highly important in their lives and possible to be addressed by smartphones. The experiment's participants in the goal-oriented mindset condition indicated which of those 13 values they considered personally important. Next, for each value, they rated the degree a smartphone could help them in terms of the value, using a five-point response anchored by "cannot help at all" and "can help very much". A task of deliberating on personal goals related to a product category was used by van Ginkel Bieshaar (2012) to measure the goal-oriented mindset. The current research used the goal-deliberating task as a manipulation to enhance the participants' goal-oriented mindset by activating their values, goals and motives in the context of the product category (smartphones). This task was absent in the comparative mindset condition. Instead, the participants were exposed to a brief statement claiming that when choosing a product, it is important to compare product alternatives. This statement was intended to enhance the comparative mindset.

In the consumer organization condition of the message source type, the participants were asked to imagine they were browsing smartphone descriptions in a consumer report on smartphones. In the e-commerce condition, the participants were asked to imagine they were browsing smartphone descriptions prepared by smartphone producers who aim to sell their products.

After exposing the participants to the stimuli smartphone descriptions (abstract vs concretized), the preference between them was measured. Next, the participants indicated the trustworthiness of each description. Then, the participants rated the realism and easiness of imagining the purchase situation presented in the questionnaire (Dholakia, 2000); the majority of participants declared that a purchase situation similar to that described in the survey could happen to them (62.4%, $\chi = 12.69$, $p < 0.001$), and stated it was easy for them to imagine such a situation (83.4%, $\chi = 23.22$, $p < 0.001$).

Finally, the participants indicated their level of expertise in smartphones and provided demographic data.

Stimuli

The participants read brief descriptions of two sets of six smartphone models. In the first set, each of the six smartphones was described by one feature. Then, participants allocated 100 points between the models according to their interest in those models in the context of buying. Three models were presented through abstract descriptions (reliability, fastness and photo quality), and each of those descriptions was followed by a model described by the same abstract description supplemented with details about a model (reliability in terms of electronic systems, fastness in terms of switching apps and photo quality in day-light, respectively). These details, composed based on discussions with several respondents from the study population, were designed to be irrelevant and not more vivid than those constituting the abstract description. This way, the two conditions differ in product-related rather than lexical abstractness.

Next, the participants read brief descriptions of the second set of six smartphone models. Then, they allocated one-hundred points between the models according to their interest in those models in the context of buying. Three models were presented through benefits (i.e. Web access, use of high-demanding apps, entertainment), and each of those models was followed by a model described through the corresponding attribute (i.e. network signal receiver and transmitter quality, compatibility with the newest software and video quality, respectively). Those benefit-attribute pairs were developed based on the focus group interviews mentioned above in the way that each attribute was perceived as instrumental to the corresponding benefit. This way, the benefit and the attribute would likely refer to the same goal. Consequently, the difference between those two would pertain to the level of their abstractness. Again, the wording used in attribute descriptions was designed to be not more vivid than those used in the corresponding benefit descriptions to maintain a similar level of lexical concreteness.

Measurements

The difference between the number of points allocated to abstract descriptions and the number of points allocated to the corresponding concretized descriptions (with irrelevant details about a product) was computed to measure consumer preference within the first set of six smartphone models. That difference served as an indicator of the preference for the abstract (vs concretized) product descriptions. That is, the higher difference indicated a higher preference for more abstract descriptions.

The difference between the number of points allocated to benefit-based descriptions and the number of points allocated to attribute-based descriptions was computed to measure consumer preference within the second set of six smartphone models. That difference served as an indicator of the preference for the benefit-based (vs attribute-based) product descriptions. Again, the higher difference indicated a higher preference for more abstract descriptions.

The perceived description trustworthiness was measured separately for each description, using a single item with the response scale anchored by "absolutely untrustworthy" and "totally trustworthy." Six items partially adapted from Thompson *et al.* (2005), $\alpha = 0.93$, measured the participants' product category expertise in terms of smartphones. Those items were pooled into a single index. The five-point response scale prompted the participants to compare themselves with their peers in terms of expertise ("much worse than average," "rather worse than average," "the same as average," "rather better than average" and "much better than average"). The measurement details are presented in Appendix 2.

Additionally, it was checked whether the presented benefits and the corresponding attributes in the stimuli product descriptions referred to the same uses of smartphones so that the difference between those two kinds of descriptions was mainly related to their levels of abstractness. To this end, the participants were asked to group, based on similarity, the benefit vs attribute descriptions of smartphone models. The descriptions within the first and the second benefit-attribute pairs were grouped as similar by the majority of the participants (Web access vs network signal receiver and transmitter quality: 81.5%, $\chi = 81.18$, $p < 0.001$; highly demanding app usage vs compatibility with the newest software: 68.8%, $\chi = 28.92$, $p < 0.001$). In contrast, the descriptions within the last pair (entertainment vs video quality) was grouped as similar only by 43.9% of the respondents. The latter suggested that limiting the sample to those who grouped descriptions right might help detect the studied relationships.

Results

Concretizing abstract descriptions by adding irrelevant details
In the first set of smartphones (i.e. abstract descriptions vs the ones concretized with irrelevant product details), the abstract descriptions were more preferred than the concretized ones, i.e. the number of points (out of 100) allocated to the abstract (vs concretized) descriptions was higher than 50 [$M_{abstr} = 59.4$, SD = 16.1, t(204) = 8.38, $p < 0.001$]. The same relationship occurred separately for each pair of smartphone features (p's < 0.001). This suggests that no additional, relevant meaning is born by this concretization. In line with *H1b*, the trustworthiness averaged across the abstract descriptions was lower than the corresponding score averaged across the corresponding concretized descriptions [$M_{abstr} = 2.98$, SD = 0.86, $M_{concr} = 3.49$, SD = 0.90, t(204) = 7.19, $p < 0.001$]. The same relationship occurred separately for each pair of smartphone features (p's < 0.001).

Benefit-based vs attribute-based product descriptions.
In the second set of smartphones (i.e. benefit-based vs attribute-based descriptions) was analyzed, trustworthiness averaged across the benefit descriptions was lower than the corresponding score averaged across the attribute descriptions: [$M_{benefit} = 2.98$, SD = 0.79, $M_{attribute} = 3.43$, SD = 0.85, t(204) = 7.64, $p < 0.001$], in line with *H1c*. The same relationship occurred separately for each attribute-benefit pair (being significant for web access and entertainment p's < 0.001; and marginally significant for demanding app usage, $p = 0.09$).

In a two-way ANOVA on the preference for benefit-based (vs attribute-based) product descriptions, with the manipulated variables as factors, the goal-oriented mindset had a positive

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effect [$M_{goal-oriented}$ = 2.4, SD = 10.3, $M_{comparative}$ = −0.3, SD = 7.7, F(1,201) = 4.87, p = 0.03], supporting *H4*. Additionally, the preference was higher in the e-commerce condition than in the consumer organization condition [$M_{e-commerce}$ = 3.9, SD = 9.1, $M_{consumer\ organization}$ = −0.3, SD = 6.2, F(1,55) = 4.26, p = 0.04], for those participants who perceived the scenario as realistic and grouped the descriptions accordingly to the predefined pairs).

Finally, there occurred an interaction effect of the goal-oriented (vs comparative) mindset and product expertise (with source type as a covariate) on the preference for benefit-based (vs attribute-based) descriptions (PROCESS model 1, Hayes (2017), b = 0.06, p = 0.001; for the participants who grouped the descriptions according to the predefined pairs). The low, medium and high levels of product expertise were determined by −1SD, mean and +1SD. Only for the high and medium expertise levels, did goal-oriented have a positive conditional effect on the benefit preference (b = 0.09, p < 0.001 and b = 0.04, p = 0.02, respectively). For low expertise, the effect was nonsignificant. The above results, presented in Figure 1, provide support for *H5*.

Discussion

First, it was demonstrated that product descriptions concretized by supplementing the abstract ones with *irrelevant* product details were perceived as more trustworthy. Additionally, benefit product descriptions were perceived as less trustworthy than the corresponding attribute product descriptions. These findings replicate the results of Study 1 for the different forms of product description concretization, keeping a similar level of lexical concreteness.

Figure 1 Consumer preference for benefit-based vs attribute-based product descriptions and consumer mindset – split by consumer product expertise (based on conditional effects in the moderation analysis; H = mean + 1 SD, M = mean, L = mean − 1 SD)

Preference for benefit-based (vs attribute-based) descriptions
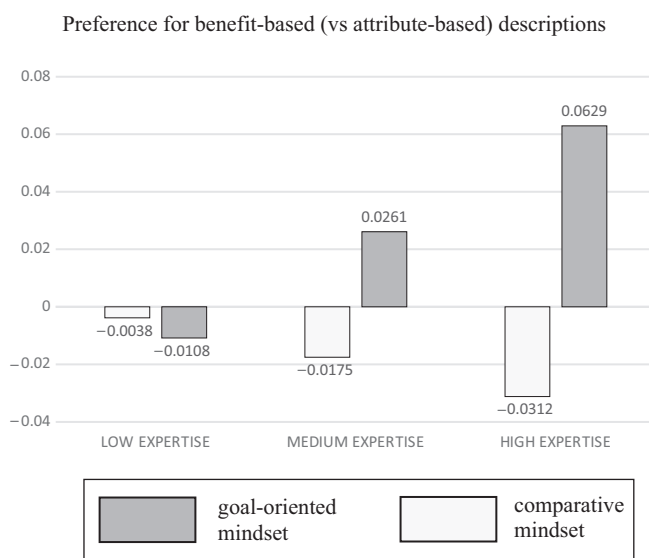
Note: The participants who grouped the descriptions according to the predefined pairs (n = 79)

Second, as expected, the goal-oriented (vs comparative) mindset seems to influence the preference for benefit-based (vs attribute-based) descriptions. Specifically, it appears that the more participants focus on their goals (and less on comparing product alternatives), the more they prefer benefit-based descriptions over attribute-based ones. Additionally, the findings suggest the description source to be an additional factor in the preference for benefit-based descriptions. Perhaps, consumers perceive e-commerce (aiming to sell products) as more appropriate for communicating product benefits than consumer organizations (which may be perceived as more focused on testing detailed product characteristics). The Study 2 results support the expectation that the effect of the goal-oriented mindset on the preference for benefit-based descriptions is more positive when consumer product expertise is high.

Another meaningful finding of Study 2 is that the product descriptions concretized by supplementing the abstract ones with irrelevant product details are less persuasive despite higher perceived trustworthiness. It illustrates the distinction between description trustworthiness and persuasiveness and shows the complexity of the marketers' dilemma of whether to present products abstractly or concretely.

Theoretical implications

The current results extend the existing literature on lexical concreteness of health-related (Miller *et al.*, 2007) and CRS-related information (Robinson and Eilert, 2018), showing that concrete (vs abstract) information is perceived as more trustworthy also in the case of the product descriptions. Unlike those previous results, the current research used the product-related conceptualization of concreteness (Houston and Walker, 1996) stemming from the means-end chain theory (Chen *et al.*, 2020; Gutman, 1982; Heinze *et al.*, 2017; Lin *et al.*, 2019; Lin and Fu, 2018; Liu *et al.*, 2022; Ratakam and Petison, 2022) instead of lexical concreteness.

The positive relationship between product description concreteness and trustworthiness was supported in three abstract/concrete description settings, manipulating the product-related abstractness while intending to maintain the lexical abstractness, i.e:

1. abstract product descriptions vs the same abstract descriptions supplemented with *relevant* details about the presented products;
2. abstract product descriptions vs the same descriptions supplemented with *irrelevant* details about the presented products; and
3. presenting product benefits vs the product attributes.

In the relevant concretization case, it was also evidenced that the higher trustworthiness of more concrete descriptions might lead to higher purchase intent. This finding enriches the previous studies on the higher persuasiveness of concrete (vs abstract) product descriptions (van Ginkel Bieshaar, 2012; Ci, 2008). Compared to the current research, the above studies were based on different forms of concretization, i.e. supplementing the abstract information on product category with examples of product alternatives (van Ginkel Bieshaar, 2012) and switching to the numerical information about a product, respectively (Ci, 2008).

The current research suggests that the positive effect of the perceived trustworthiness of concretized descriptions on purchase intent may, in some product categories (like food), be enhanced by consumer product expertise. This way, the current research supports the previous suggestions that consumers higher in product expertise may be more confident with their assessment of product information (Filieri, 2016; Selnes and Howell, 1999). In the case of irrelevant concretization, the current results emphasizing its positive effect on perceived trustworthiness shed new light on the notion of Meyvis and Janiszewski (2002), who evidenced the negative impact of irrelevant product information on product evaluation.

Next, the current findings evidence that the more abstract information in the form of presenting product benefits (vs attributes) may depend on the consumer shopping-stage mindset. Specifically, benefit-based descriptions may be more persuasive when the goal-oriented (vs comparative) mindset is activated. This way, the current research applies the idea of the means-end chain theory (Chen *et al.*, 2020; Gutman, 1982; Heinze *et al.*, 2017; Lin *et al.*, 2019; Lin and Fu, 2018; Liu *et al.*, 2022; Ratakam and Petison, 2022) and consumer shopping-stage mindsets (Lee and Ariely, 2006; van Ginkel Bieshaar, 2012) to the domain of consumer response to product descriptions.

By evidencing the role of shopping-stage mindsets in the persuasiveness of abstract/concrete product information, the current research adds to the growing literature on consumer mindsets, i.e. the studies investigating the role of construal-level mindsets in the persuasiveness of abstract/concrete product descriptions (Bartikowski and Berens, 2021; Connors *et al.*, 2021; Denizci Guillet *et al.*, 2022; Hu and Winter, 2019; Lee *et al.*, 2021; Wang and Lehto, 2020; Xu *et al.*, 2021).

Importantly, the goal-oriented vs comparative mindset operationalization used in the current research (Study 2) emphasizes the conceptual difference between shopping-stage mindsets and construal-level mindsets (abstract vs concrete). The construal-level mindsets refer to how consumers perceive objects (e.g. "Why to use them?" in the abstract mindset vs "How to use them?" in the concrete mindset). Those two states were reflected in the manipulation used by Hernandez *et al.* (2015; Study 2), who investigated construal-level mindsets in the context of consumer response to benefit-based vs attribute-based product descriptions. In contrast, the goal-oriented vs comparative mindsets relate to the shopping phases (e.g. "Which goals are relevant in that context?" in the goal-oriented mindset vs "How the products differ?" in the comparative mindset), which were considered in the manipulation used in the current research.

Finally, the current research suggests that the positive effect of the goal-oriented (vs comparative) mindset on the preference for benefit-based (vs attribute-based) product descriptions is more positive in the case of high product expertise. This conclusion supports the means-end chain theory, which posits that consumer product knowledge is organized through the continuum from product concrete attributes to personal values and goals (Chen *et al.*, 2020; Gutman, 1982; Johnson, 1989). The current results extend the previous findings on the role of consumer expertise in abstract/concrete information persuasiveness (Graeff, 1997; Maheswaran and Sternthal, 1990; Raimondo *et al.*, 2019) by involving the consumer shopping-stage mindset as an interplaying factor.

Practical implications

The current results encourage marketers aiming to improve the trustworthiness of their communication (e.g. to build a reputation or strengthen the relationship with consumers) to use more concrete product descriptions, even if they are irrelevant in the sense they provide no informative details that consumers may relate to their desires. This irrelevant concretization may be especially helpful when a promoted product has no distinguishing relevant features. For example, when a promoted smartphone model is of average operation speed, it may be described as fast in terms of switching apps. This irrelevant detail may make the message more trustworthy. But when the marketer's goal is to improve message persuasiveness, it is worth concretizing abstract descriptions (e.g. "comfortable") with relevant product details (e.g. "shape"), which are presented as supporting the abstract feature (i.e. "shape improves the comfortableness"). This form of concretization may be especially effective among knowledgeable consumers. A corresponding conclusion pertains to policymakers and consumers. Namely, they may take advantage of examining if product details included in the offer are actually relevant to consumers or they just make the message look more sincere.

The results of the current research may also suggest marketers who aim to improve the persuasiveness of their communication when it is more effective to present product benefits instead of attributes. Namely, presenting benefits may be more effective when consumers, especially knowledgeable ones, consider a product through their values, goals and motives. It is likely to happen at the early stage of purchase or when personal goals are activated by the context in which they receive the offering (e.g. when consumers receive personalized ads via social media). In contrast, presenting product benefits may be less effective when consumers are focused on comparing product alternatives (e.g. prompted to do that by a website right before buying). For policymakers and consumers, the current results suggest it is worth encouraging consumers to reconsider their attraction to an offering by taking the perspective of another purchase stage. Namely, consumers in the later, comparative stage may be asked to think more about their goals, while consumers in the earlier, goal-oriented stage may be prompted to focus more on comparing different alternatives before forming a final judgment on a given product.

Limitations and directions for further research

Although the current research evidenced the proposed effects of product description concretization on its perceived trustworthiness for three types of concretization (i.e. relevant, irrelevant and attribute-based), only three product categories were used for the relevant concretization, and only one product category was used for the irrelevant and attribute-based concretization. As the current research used young adult populations in all studies, one may doubt the replicability of the demonstrated relationships. Further studies should, then, test the above effects across various product categories and consumer populations.

Certain unexpected findings call for further investigation. In Study 1, the moderating role of product expertise depended on a product category. The effect of description trustworthiness on purchase intent was stronger for high levels of expertise about food, while no moderation was found for technological products (headphones and laptops). In Study 2, the preference for benefit-based (vs attribute-based) product descriptions was higher for e-commerce (vs consumer organization) as a description source.

The current research is interview-based, focusing on consumer intentions and attitudes. It is worth, then, testing the proposed relationships using directly observable consumer reactions (e.g. eye movements and fixation). For example, according to the current research results, one may expect that consumers in the goal-oriented (vs comparative) mindset may look more at more abstract, benefit-based product descriptions (vs concrete, attribute-based ones).

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Appendix 1. Stimuli product descriptions in Study 1

Abstract products descriptions
Headphones.
Convenience of use
  High durability
  Perfect sound quality

Protein bar.
Satisfies feeling of hunger
  Provides energy
  Supports health

Laptop.
Perfect image quality
  Works efficiently
  Works instantly

Concretized product descriptions (the abstract information supplemented with relevant details about a product)
Headphones
Convenience of use thanks to headphone shape
  High durability thanks to aluminium coating
  Perfect sound quality thanks to high sound isolation

Protein bar
Satisfies feeling of hunger thanks to content of nutritional ingredients
  Provides energy thanks to carbohydrate and protein content
  Supports health thanks to vitamins of natural origin

Laptop
Perfect image quality thanks to full HD monitor
  Works efficiently thanks to Intel Core i9 processor
  Works instantly thanks to RAM 16 GB DDR4

Appendix 2. Study 1 Measurements

Purchase intent (adapted from Hardesty et al., 2002)
What is the likelihood that you would consider buying this product?
  1 – I would not consider its purchase at all; 7 – I would definitely consider its purchase.

Perceived description trustworthiness (adapted from Ghazisaeedi et al., 2012)
Within the context of the earlier presented product descriptions, address the following statements:
  1 – they are totally unbelievable; 7 – they are totally believable.
  1 – they are totally insincere; 7 – they are very sincere.
  1 – they are not useable at all; 7 – they are greatly useable.
  1 – they are totally untrue; 7 – they are totally true.
  1 – they cannot be trusted at all; 7 – they can be fully trusted.

Consumer product expertise (adapted from Lambert-Pandraud et al., 2005)
Please answer the following questions (1 – strongly disagree; 7 – strongly agree):
  I keep informed about news of [the healthy food market/technology products].
  I could give good advice on [healthy food/technology products] if I were asked to do so.
  I know a lot about [healthy food/technology products].

Study 2 Measurements

Consumer preference within a set of product alternatives
You decide to buy a new smartphone and learn about various smartphone models by browsing a website.
  Please, allocate 100 points between the presented models. The more points you allocate to a model, the more interesting it is to you.

Perceived description trustworthiness (for each product description)
Please, determine how trustworthy the smartphone description is in your opinion. Mark the place on the scale that best suits your assessment (1 – the description is absolutely untrustworthy; 7 – the description is totally trustworthy).

Consumer product expertise (partially adapted from Thompson et al., 2005)
Please indicate the level of your knowledge about smartphones compared to an average person of your age (1 – much worse than average; 5 – much better than average):
  I am familiar with smartphones.

I know which smartphone features are important.
I have knowledge about smartphones.
I am experienced in using various kinds of smartphones.
I am experienced in using various functions of smartphones.
I have technical knowledge about smartphones.
I am familiar with technical innovations in smartphones.

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