# UNVEILING ETHICAL PRODUCT FEATURES:

## THE IMPORTANCE OF AN ELABORATED INFORMATION PRESENTATION

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## Abstract

Despite growing consumer awareness of ethical consumption, market sales are not growing accordingly. Because the presentation of appropriate ethical product information may influence consumers to choose ethical products, this paper analyses the requirements necessary for the successful communication of ethical product features. Based on McGuire's (1976) information-processing model, and a review of current literature, the information's comprehensibility, meaningfulness, and credibility are investigated in an online survey of US American citizens (n = 595) for two product categories representing Fast Moving Consumer Goods, and durable goods. A generalized mixed logit model revealed that all three communication factors affect consumers' choices. The more concerns about, or expertise in, organic production and fair trade purchase the consumers expressed, the less important their price sensibility and the more they preferred a comprehensive addendum and credible sources (e.g., government certificate or traceability). The results strongly suggest that advertisers and marketers can customize product communications in order to better engage both the mass market, and ethically oriented consumers.

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**Keywords**

Ethical consumption, message framing, comprehensibility, meaningfulness, credibility, price

sensibility

# 1 Introduction

Ecological problems, resource exploitation and poor human working conditions are increasingly gaining global attention (Gleim et al., 2013). For a long time, this has been addressed by a focus on environmental aspects of production and consumption. Given the described multifaceted problems, an expansion to ethical production and consumption is indicated, which considers the fulfilment of human rights and animal welfare in addition to environmental protection (Doane, 2001).

Hence, businesses need to engage with products and production methods which fulfil ethical criteria. Accordingly, they are spending more on the advertising of ethical products and services (Minton et al., 2013). Nevertheless, businesses alone cannot succeed in aiming for more environmentally and socially responsible practices. Consumer compliance is also a major contributor to this success because if consumers' purchase decisions do not include environmental and social aspects, and related production methods, products and services will fail in the market. While there has been an increase in mindful consumption, which refers to consumers with a mind-set of caring for themselves, their community and nature, leading to consumption that optimizes their wellbeing and values (Sheth et al., 2011), it is often reported that ethical consumption is considerably lower than consumers' ethical concerns may suggest (Doorn and Verhoef, 2015; Tseng and Hung, 2013). Amongst others, this phenomenon is referred to as the 'Ethical Purchasing Gap' (Nicholls and Lee, 2006) or environmental/social 'value-action gap' (Chung and Leung, 2007). The gap between verbal and actual commitment to ethical consumption is well described in the literature, and several approaches have been investigated in an effort to close this gap. Within this context, marketing has been identified as important to continuously gaining consumer awareness about ethical issues, and to achieving a shift to more environmental and socially responsible consumption patterns (Osburg et al., 2016a). Guiding consumers towards more ethical consumption is therefore an important task of marketing research, practice, and communications.

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To achieve a shift to more ethical consumption, consumer awareness about its importance is a major requirement (Pelsmacker and Janssens, 2007). This awareness has different roots: On the one hand, awareness can be raised by situational signs, i.e., through marketing communications or other forms of product communication (e.g., ethical labels, information on product packaging). On the other hand, awareness about ethical consumption can also be the result of a personality trait, and for example be driven by a consumer's concerns and habits (Doorn and Verhoef, 2015).

With respect to raising consumer awareness through situational signs, different approaches can be used to inform consumers about a product's ethical features. Labels deliver ethical information in an aggregated way and they represent an established approach in science and consumer behaviour research (Vecchio and Annunziata, 2015). Further, a detailed product information presentation, (e.g., consumers' information retrieval at the Point of Sale through the support of technological applications such as entering an identifier or scanning a bar code) has recently been discussed as an alternative approach, being particularly suitable for high-involvement purchases or product choices, where consumer acceptance is threatened (Osburg et al., 2016a). Current research indicates that the presentation of product information can be a moderator of consumers' ethical product choices, at least for consumers who care about these issues (Osburg et al., 2016a). Independent of the chosen approach, consumers' purchase decisions often do not seem to include ethical considerations (Bray et al., 2011), indicating that ethical aspects need to become more salient for an individual consumer.

While many previous studies have focused on the information content or selection of appropriate ethical labels (e.g., Cai and Aguilar, 2013; Didier and Lucie, 2008), little attention has been given to how ethical product information should best be framed (i.e., which characteristics ethical product information should fulfil) so that consumers consider it in their purchase decisions. This paper therefore explores whether an elaborate framing of ethical product information is more effective compared with the conventional approach of disclosing

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ethical information. Additionally, this study investigates the best message framing for both the mass market, and for ethically concerned consumers. Our research therefore addresses an under-researched area of marketing communications, i.e., the framing of ethical messages, by building on an established information-processing framework (McGuire, 1976). This understanding will be of relevance for the research streams about ethical product information disclosure, i.e., labelling (e.g., Thompson et al., 2010; Vecchio and Annunziata, 2015), and traceability (e.g., Hobbs et al., 2005; Osburg et al., 2016a). It will also contribute towards the discussion about how to best target either the mass market or a special eco-niche (Osburg et al., 2016b). Furthermore, this research provides insights into why businesses' growing expenditure on ethical advertising may not yet have transformed into more ethical consumer choices (Tseng and Hung, 2013). The results provide marketing practitioners with recommendations about how to frame ethical product information in order to disclose information, which actually affects consumer choices.

The remaining article is organised as follows: Section 2 reviews important characteristics of message framing for ethical products based on an overview of current literature. The identified characteristics are summarized in a conceptual framework, which is then tested in an empirical study. The methodological approach is introduced in section 3, while section 4 presents the results of the online survey. This paper concludes with a discussion of marketing implications for the framing of ethical product information, and suggestions for further research in the area of marketing communications.

## 2 Literature review and conceptual framework

The following presents a literature overview about how the framing of ethical product information may help increase consumer choices of ethical products. To identify message framing criteria, McGuire's (1976) information-processing framework is reviewed. Based on this, the following three criteria are identified, and their influence on consumer choices is considered based on current literature: comprehensibility, meaningfulness, and credibility.

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Furthermore, the price of ethical products and the costs of information disclosure are included as a fourth characteristic, given that price represents a main barrier for ethical consumption (Doorn and Verhoef, 2015).

Overall, the paper restricts ethical issues to fair trade and environmental protection because these issues are relevant for all product categories. Different product categories are also considered as the importance of ethical features varies among these categories (Wheale and Hinton, 2007). In light of investigating product information communication, a consideration of both, high- and low-involvement purchase decisions was indicated because this also impacts ethical product choices.

## 2.1 Consumers' information processing

It is important to consider the full consumer decision path to better understand consumer choices, and classic paradigms provide a useful guide for a deep investigation (Batra and Keller, 2016). McGuire's (1976) information-processing framework describes eight steps which ultimately affect consumer choices by being related to an individual's personality: Exposure, perception, comprehension, agreement, retention, retrieval, decision making and action. As the focus of the current research is on the framing of ethical product information, only those steps which marketing communications can use to create impactful ethical product information have been reviewed. Contrary to the model's strict sequence, current research indicates that consumers may go through interacting steps (Batra and Keller, 2016). Therefore, it becomes essential to assess how marketing communications can address the identified characteristics simultaneously.

According to the information-processing model (McGuire, 1976), perception refers to the selective processing of information; hence, consumers draw their attention only to a small subset of the information they are exposed to. Consequently, it is crucial to provide information, which an individual perceives as worth considering. The Elaboration Likelihood Model (Petty and Cacioppo, 1986), suggests that consumers who value ethical product

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information (i.e., individuals following the central route of information processing) are expected to require an elaborated information presentation, which ultimately leads to a detailed understanding of the ethical cause. Hence, *comprehensibility* represents the first important characteristic of ethical product information. The next step is comprehension of what is perceived, and points to the fact that "one must go beyond mere perception and effectively encode the information in one's meaning system so that one can grasp its import" (p. 306). This illustrates the importance of providing individuals with information, which is *meaningful* to them. Furthermore, McGuire (1976) highlights the importance of agreement with what is comprehended. Although comprehensible and meaningful information can be disclosed to individuals, the information will not be further processed if an individual doubts its truth. Hence, *credibility* emerges as the third characteristic for framing product information.

In summary, McGuire's (1976) information-processing model points to three characteristics of ethical product information, marketing communication should focus on when framing ethical messages: comprehensibility, meaningfulness, and credibility. In the following, these criteria are considered in detail by reviewing the latest relevant literature.

**2.2 Comprehensibility**

The review of the information-processing model (McGuire, 1976) identifies comprehensibility, which is reflected by information complexity and depth (Petty and Cacioppo, 1986), as the first important characteristic for framing ethical product information. The two approaches of information delivery, i.e. labelling and product information presentation, differ in the information detail obtained. In the case of low-involvement purchases, labels allow consumers to make a quick decision. However, consumers' understanding of and engagement with the presented information becomes more important for high-involvement purchases. Advertising and marketing communications attempts to reveal a product's ethical features, such as labels and claims on product packaging, often

present only general information, leaving the consumer to infer the real meaning. Whilst labels contain a highly-aggregated information content, aiming to facilitate the time-efficient acquisition of information, such labels simultaneously risk being too abstract to be accurately understood by consumers (Borin et al., 2011). The ethical information included in such labels is often limited to a few generic phrases such as 'sustainable' or 'environmentally friendly' (Amstel et al., 2008), and consequently consumers must be highly motivated to search for further information in order to capture the full ethical meaning. Even internationally and across-industries recognized labels are often confusing for consumers, because the meaning of any given label may also vary among contexts (Borin et al., 2011). As consumers do not usually engage in deep information searches, labels at least partially fail their intended purpose, i.e., the reduction of information asymmetry between supplier and buyer (Amstel et al., 2008). Therefore, to allow for more informed purchase decisions it is important that information is provided that consumers can understand without undue effort. This necessitates a greater amount of pertinent information to be accessible than is currently given on traditional labelling, with the flexibility of further expansion provided the consumer desires it (Osburg et al., 2016a). Further, explanations may help to inhibit the occurrence of wrong consumer expectations which have been identified as a barrier for the success of ethical consumption (Tseng and Hung, 2013). Hence, explanations are supposed to increase ethical consumption.

*Hypothesis 1 (H₁):* Explaining the terms 'organic' and 'fair trade' leads to more frequent consumer choices of these products ($H_{1a}$[1]), especially for consumers valuing ethical purchases *(H₁ᵦ)*.

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## 2.3 Meaningfulness

The presented information should also be meaningful to an individual, allowing consumers' purchase decisions to easily reflect their individual ethical considerations (Osburg et al., 2015). Meaningfulness implies that an individual perceives the presented message as personally relevant (McGuire, 1976), and thereby in line with his/her value system. Though certain ethical product information may be an essential issue for society, it can be of minor importance for an individual consumer compared to those issues he/she is confronted with every day (Bradu et al., 2014). When products have high prices consumers often feel less obliged to choose the ethical alternative due to purely ethical considerations (Bray et al., 2011). Consequently, exploration is needed to determine how information may best be presented so that consumers feel compelled to consume more ethically. This may be achieved by strengthening the general ethical claims which are common in labelling (Borin et al., 2011), once the ethical concerns of importance to consumers have been identified. These concerns, which may depend on product category, do not have to fully correspond to traditional claims, but can be related to them. Current literature indicates that, instead of a mere ethical claim, other issues such as local heritage (Flint and Golicic, 2009), references to resource allocation for future generations (Loureiro and Lotade, 2005), and mindful consumption (Sheth et al., 2011) may be related topics which are meaningful to an individual consumer.

*Hypothesis 2 (H$_2$):* Providing meaningful ethical-related information generally leads to higher consumer product choices compared with a mere ethical claim (H$_{2a}$), especially, for consumers valuing ethical purchases *(H$_{2b}$)*.

## 2.4 Credibility

The third characteristic of ethical product information is credibility, which can be understood as the quality of the provided information (Moussa and Touzani, 2008). Previous research indicates that the perceived credibility is a mediator between the received information and

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ethical choices (Leire and Thidell, 2005). Credibility, however, mainly depends on the source, and more specifically, on the source's competence and trustworthiness (Eisend, 2002). Given this, consumers' growing mistrust towards product information represents a challenge for advertisers and marketing communication specialists (Nuttavuthisit and Thøgersen, 2015). Recent food scandals have led to consumers becoming sceptical about label claims, especially if these claims concern credence attributes (Bradu et al., 2014). Ethical information also represents a credence attribute (Atkinson and Rosenthal, 2014), one which is further exasperated by the greenwashing attempts of some companies which has negatively impacted the genuine green marketing efforts of reliable businesses (Chen and Chang, 2012). Particularly, consumers with high concerns about, or expertise in, ethical consumption may require credible information because these consumers tend to be more critical in their assessment of ethical claims (D'Souza et al., 2007). In this context, consideration must be given to the fact that different entities can provide ethical information. For example, the ISO 14020 series differs between the following three environmental label types (Rex and Baumann, 2007; based on ISO 14020):

- Type I: the most commonly studied, classic third-party certified ecolabels
- Type II: self-declared environmental labels
- Type III: quantifiable environmental information based on life-cycle analysis.

Current research shows that consumers' perceived credibility varies among these different types: Since consumers may be concerned that private companies can euphemise or only selectively supply information items, information that is verified by government and/or reliable independent third party organisations is considered preferable (Ortega et al., 2011). Alternatively, transparency can be achieved through traceability. If consumers can trace back a product to, for example, its place of origin, consumers' mistrust can be countered (Osburg et al., 2015). Traceability does not only reveal the country of origin, it is also an opportunity to make much more detailed product information accessible to consumers - such as precise information about environmental or social impacts (Appelhanz et al., 2016).

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Hence, traceability facilitates more informed purchase decisions. By being able to personally verify ethical claims through traceability, consumers develop higher confidence (Bradu et al., 2014). In line with this, current literature indicates that consumers value the traceability of detailed product information even more than independent third party certification (Ortega et al., 2011). Traceability is not only a tool to convey environmental information, but also to deliver information about compliance to human rights (Bradu et al., 2014).

*Hypothesis 3 (H₃):* Generally, product choices will increase if ethical information is provided by a competent and trustworthy source (Credibility). The highest increase in results will be from traceability, followed by governmental certification, and self-declared certification (H₃ₐ). These credibility advantages will hold especially for consumers valuing ethical purchases *(H₃ᵦ).*

## 2.5 Price

Products fulfilling ethical criteria are generally priced higher than conventional ones, for example, fair trade often results in price premiums to guarantee a certain standard of living and working conditions for producers in developing countries (Andorfer and Liebe, 2015). The potential impact of these additional costs on choice cannot be neglected – ethical products must still be competitively priced since price is a main barrier for ethical consumer choices (Doorn and Verhoef, 2015). The extant literature indicates that price has a stronger influence for products consumers buy less frequently (e.g., furniture), compared with more frequently purchased products (e.g., food) (Cai and Aguilar, 2013). Whilst the delivery of ethical product information to consumers requires another surcharge, e.g., for certification or traceability (D'Souza et al., 2007), the literature promisingly indicates that consumers are willing to pay a surcharge for products with a label referring to eco-friendliness (Ward et al., 2011), or fair trade (Didier and Lucie, 2008). Bernard et al. (2015) show that price sensitivity may impede ethical choices of certain product categories, and that price sensitivity is a stronger predictor of ethical choices than an individual's ethical considerations, although they jointly affect purchase decisions. Because of the price premium and consumers' related

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price sensitivity it is assumed that product price is more important the higher the price level of the product category.

*Hypothesis 4 (H₄):* Product price influences consumers' choices. Consumers generally are less price sensitive for Fast Moving Consumer Goods (FMCGs) compared with durable goods (*H₄ₐ*). However, the price sensitivity is expected to be lower the stronger consumers' preference for ethical purchases (*H₄ᵦ*).

## 2.6 Individual Differences

According to the person-situation interaction approach (Kahle, 1984), situational characteristics interact with individual differences. For example, the importance of information rises with its usefulness for individual adaptation (Kahle and Homer, 1985). Also in respect to ethical purchases individual differences systematically influence the effect of ethical treatments (Bickart and Ruth, 2012). Consumers' concern about (aspects of) ethical consumption drives a higher interest in ethical products (Pelsmacker and Janssens, 2007). Hence, via purchase experience, consumers concerns transition into expertise. Consumers' knowledge and expertise have been the focus of several studies which are related to ethical consumer behaviour (e.g., Gleim et al., 2013; Thøgersen et al., 2010). A lack of expertise has been found to be a main barrier to green consumption (Gleim et al., 2013), whereas expertise increases attention, information elaboration and a better understanding (Thøgersen et al., 2010).

Both individual factors, concerns and expertise, are therefore expected to interact with the product information factors. Consumers with higher concerns and expertise are expected to benefit more from comprehensible ethical product information than the average consumer (H1b). Additionally, high concerns and high expertise are supposed to be accompanied by a stronger valuation of the presentation of meaningful information because ethical consumption is an important part of their everyday life (H2b). Consumers with higher concerns and expertise are also expected to be particularly sceptical about ethical product

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information, and may therefore require reassurance (H3b). Additionally, the literature indicates that consumers who emphasise sustainable and ethical consumption show a higher willingness to pay a surcharge for ethical products (Thompson et al., 2010), thus consumers with higher concerns and expertise supposedly portray less price-sensitivity (H4b). In line with the person-situation interaction approach Fig. 1 summarizes the eight hypotheses.
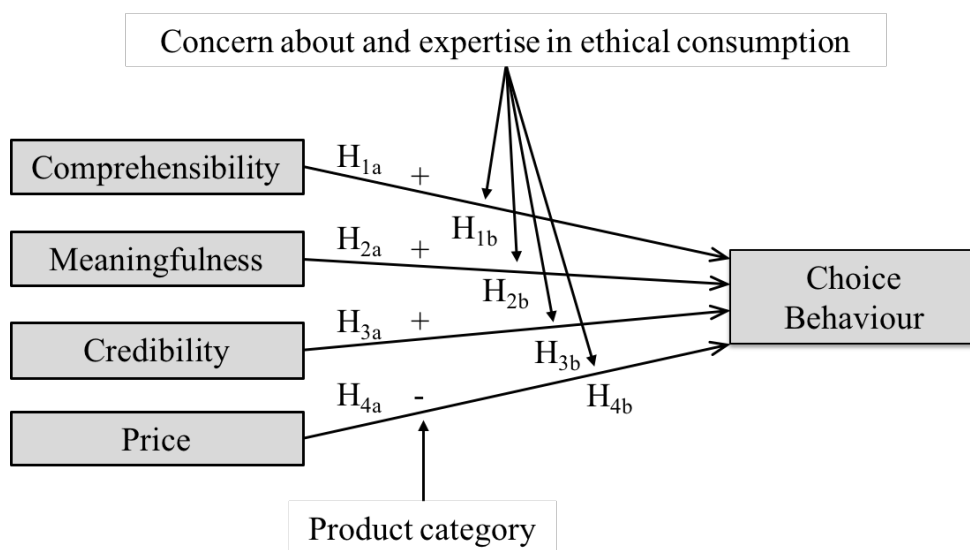


**Fig. 1.** Conceptual framework and hypotheses.

## 3 Methods

In order to test the conceptual framework, a confirmatory survey research was applied (Forza, 2002). We conducted an online study with 654 US American citizens, 595 of whom had fully completed. All respondents are members of the clickworker panel (www.clickworker.com), and a probabilistic sampling was used to receive a representative sample of US American consumers (equal proportion of men and women, consideration of all age ranges, household incomes etc.). The survey was conducted from December 16th - 21st, 2015. The mean age was 36.93 years ($SD = 13.23$, range from 18 to 74); 43.5% of the respondents were male and 56.5% female.

The survey consisted of several parts. At the beginning of the survey, participants were informed of the purpose and anonymity of the study. Informed consent was implied by the returning of a complete questionnaire by respective respondents. Respondents were randomly assigned to one of two product categories, either the durable goods realized by chairs (52.5%), or the FMCGs realized by chocolate bars (47.5%). Both product categories were selected as consumers are aware of environmental and social issues related to these products, and both have previously been used in consumer studies about organic and fair trade consumption to represent durable goods and FMCGs (e.g., Bradu et al., 2014; Osburg et al., 2016b). After the introduction of the product category, consumers' choices between organic and fair trade products were measured with a choice-based conjoint analysis (CBCA), allowing investigation of the trade-offs consumers make between different product attributes during purchase decisions (Green and Rao, 1971). Subsequently, individual differences were measured with established scales. At the end of the survey, socio-demographic information was documented and respondents were thanked for their participation.

A CBCA was selected as it is one of the best available methods to approximate real purchase decisions, e.g., by allowing an indirect measurement of consumer choices, which is less likely to be associated with social-desirability bias than a direct retrieval of consumers' purchase intention (Osburg et al., 2016b). Conjoint analyses rely on the assumption of utility theory, which states that products can be distinguished by certain product attributes and that purchase decisions emerge from a consumer's evaluation of these attributes (Huang and Fu, 1995). The attributes considered in this study are comprehensibility, meaningfulness, credibility, and price. Table 1 documents the attributes and their levels. The levels of comprehensibility, meaningfulness, and credibility were derived from the literature review (credibility also reflects the classification of environmental labels and declarations according to ISO 14020), while the price levels were determined based on the recommendations of Osburg et al. (2016b), who suggest to use the base price ± 15%. The interval of ± 30% was

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also included to better reflect market price differences within the considered product categories.

The number of choices per participant was reduced by a fractional factorial design. Each respondent received 14 choice sets, 2 of them fixed and 12 randomly selected by Sawtooth Software, Inc. SSI Web (version 8.4.8). Every choice set consisted of two alternative products, supplemented with a 'none of these' option to better reflect real purchase situations. Respondents were asked to select those products they would also choose in reality. A pilot test was conducted with eight experts, who assessed the CBCA operationalisations, and clarity of the four attributes and their respective levels. Minor modifications were made based on their comments before conducting the main study.

In summary, per choice set participants were introduced to three product alternatives. These alternatives were distinguished based on their product information. The information differed with respect to comprehensibility, meaningfulness, credibility, and price. Two of the three products represented fair trade and organic products, while the third alternative was a no choice option. Respondents had to decide which product they would most likely choose based on the verbal product information, which was shown in a table. The given product information was randomly selected based on the attributes listed in Table 1. This choice was repeated 14 times per participant. Comprehensibility and meaningfulness were structured as mere categorical variables with alternatives to be tested against the "no"-reference, whereas credibility is already depicted in Table 1 in a non-arbitrary ordinal order.

**Table 1**

Attributes and levels of the CBCA.

| Attributes | Levels | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| **Comprehensibility** | Organic and fair trade - biological inputs for agricultural and forestry production systems, fair workers' and producers' pay, range of rights and conditions, commitment to social development | *(no explanation)* | | | |
| **Meaningfulness** | Locally produced | Preserves *resources* for future generations | Mindful production for *ethical* consumption | *(no information)* | |
| **Credibility** | The *producer declares* that this is an organic and fair trade product | *Government certifies* that this is an organic and fair trade product | You can *trace back* that the raw material is from an organic origin, and that fair trade criteria are met | *(no information)* | |
| **Price (chocolate)** | 0.80 $ | 0.95 $ | 1.10 $ | 1.25 $ | 1.40 $ |
| **(chair)** | 50 $ | 60 $ | 70 $ | 80 $ | 90 $ |

### 3.1 Scales to assess individual differences

*Concern about organic production and fair trade* was measured with the 3-item scale from Pelsmacker and Janssens (2007). The wording was adapted by the inclusion of fair trade; e.g., 'Organic production and fair trade ought to be the benchmark of production and trading and not the exception'. Respondents answered on a 7-point scales ranging from 1 (strongly disagree) to 7 (strongly agree) (Cronbach's alpha = .93, $m$ = 4.70, SD = 1.52).

*Expertise on organic and fair trade products* was assessed with a 4-item scale (Gleim et al., 2013, based on Sharma and Patterson, 2000), which was again adapted by referring to 'organic and fair trade products' instead of 'green products'; e.g., 'I have a great deal of knowledge about organic and fair trade products'. The same 7-point scale was used (Cronbach's alpha = .95, $m$ = 3.09, SD = 1.55).

This approach was chosen in order to assess the two constructs based on established scales. The measurement relies on scales, which have been successfully used in previous studies, and have thereby proven to measure both constructs reliably. Furthermore, 7-point scales were used as the literature indicates that they are superior over other scales in several ways (Dawes, 2008; Krosnick and Presser, 2010): a) they include midpoints, which increase reliability and validity, b) they increase the variance compared to 3- and 5-point scales, and c) as previous studies either relied on 5- or 7-point scales, a 7-point scale improved commensurability (compared to 10-point scales).

### 3.2 Data analysis

Data analysis was conducted with SPSS 23. The CBCA was analysed with a generalized mixed logit model with 28 cases defined by 14 trials times the left/right offer within each consumer. To account for correlation between choices within a participant, their ID specifies a random effect block. 'Choice' as the categorical dependent variable was a dichotomous dummy with the values of 1 (selected) and 0 (not selected; reference). The model uses a multinomial distribution and a logit link to relate the choice to a linear combination of the predictors: Comprehensibility (coding: 1 = explanation, 2 none), meaningfulness (coding: 1 =

local production; 2 = resource preservation; 3 = mindful ethical consumption; 4 = none),

credibility (coding: 1 = declared by producer; 2 = certified by government; 3 = traceability; 4 =

none), price (scaled and centred: -2 = base price – 30%; -1 = base price – 15%; 0 = base

price; +1 = base price + 15%; +2 = base price + 30%) and the interaction of price and

product category (product effect coding: -1 = FMCG, +1 = durable goods). SPSS takes the

highest code of the qualitative factors as reference category, scaled predictors were centred.

The interactions of the centred individual difference variable (either concern or expertise)

with the information and price factors were included as fixed effects, too.

## 4 Results

Table 2 shows the results of the generalized mixed logit models conduced for each individual

difference variable. Although the convergent validity of ethical concerns and expertise on

organic and fair trade products with $r = .520$ is far from perfect redundancy, both the model

including concern, and the model including expertise, yielded very similar results; hence a

joint presentation suffices. The significant constant parameter already indicates a lower total

share of choices of products in the respective reference factor level, i.e. without

comprehensibility, meaningfulness and credibility addenda (see Table 1). The negative main

effect of the consumer differences dimension fortified the rejection of such products the

higher the concerns or expertise of the consumers were. As predicted by $H_{1a}$, a clarification

of the term 'organic and fair trade' increased predicted product choice from 45.9% to 51.5%.

Fig. 2 shows that, confirming $H_{1b}$, the higher the concern about organic and fair trade

products, the higher was the effect of a comprehension enhancing addendum, and the less

likely was the choice of an ethical product without further explanation about organic

production and fair trade.

Meaningfulness also reached a significant main effect (global $F(3, 16.08) = 16.55$; 16.73),

confirming $H_{2a}$: Information about local production (predicted choice 52.8%), resource

preservation (predicted choice 49.2%) and, at the border of significance, mindful ethical
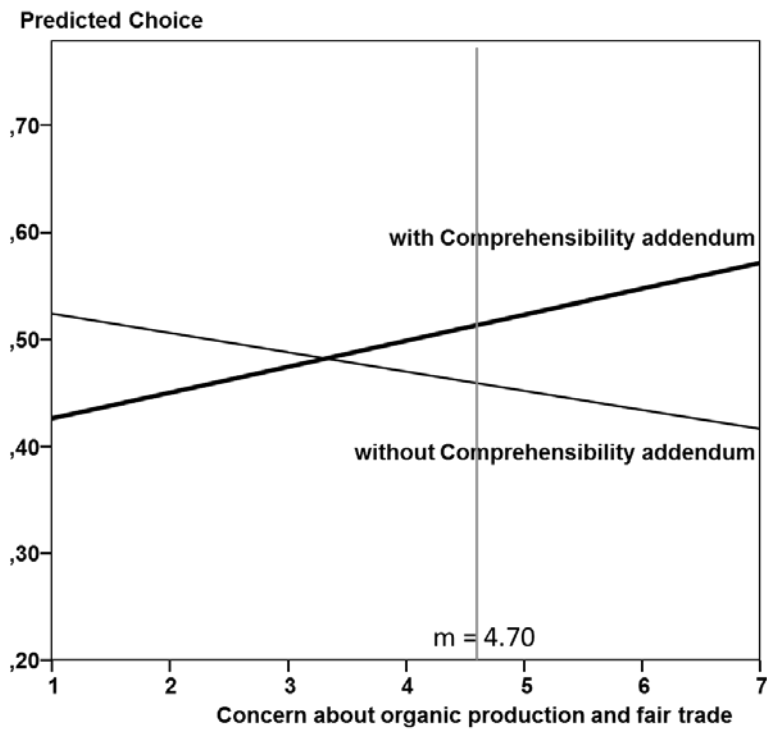
consumption (predicted choice 46.8%) increased consumer choices against the no addendum reference level (predicted choice 46.0%). Interestingly, none of the meaningfulness effects were moderated by personal differences of consumers (global $F(3, 16.08) < 1$; n.s. local parameters in Table 2), hence $H_{2b}$ was not accepted.
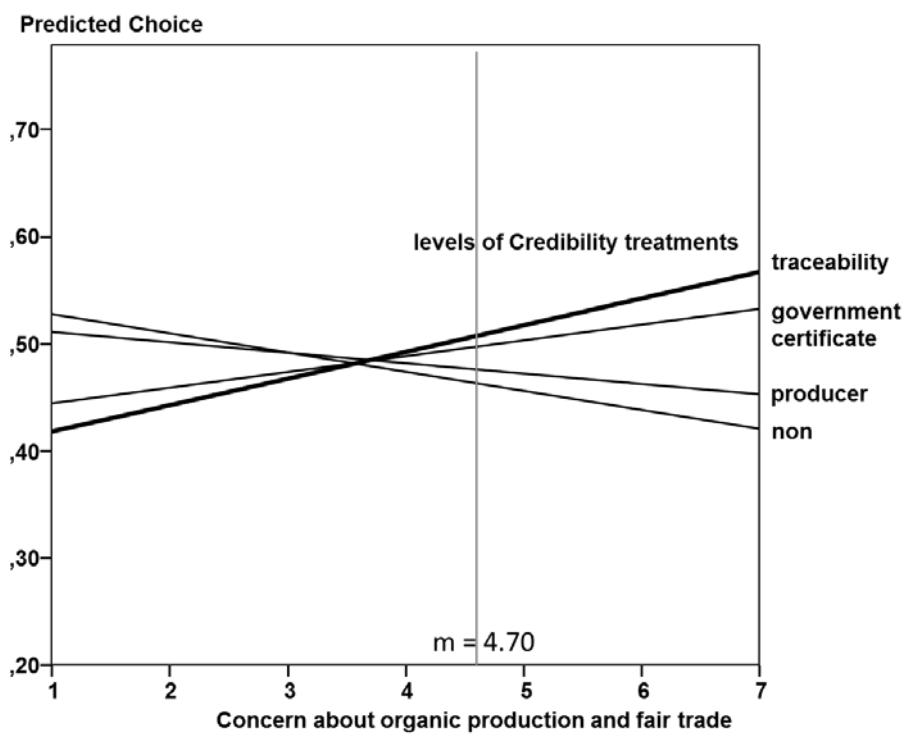
**Table 2**

Results of two Generalized Mixed Logit models *(The first row of each row pair derives from the consumer concern model, the second from the consumer expertise model).*

| | **Main effects**: Info attributes | | | **Moderation** by Consumer Concern (upper row) Expertise (lower row) | | |
|---|---|---|---|---|---|---|
| | B | | Odds Ratio | B | | Odds Ratio |
| **Constant Term** | -.496 -.498 | *** | .61 | -.118 -.063 | *** * | .89 .94 |
| **Comprehensibility** = 1 | .322 .325 | *** | 1.38 | .323 .325 | *** | 1.38 |
| **Meaningfulness** | | | | | | |
| Meaningfulness = 1 | .317 .317 | *** | 1.37 | .021 -.004 | n.s | 1.02 .99 |
| Meaningfulness = 2 | .178 .179 | *** | 1.19 | .050 -.002 | n.s | 1.05 .99 |
| Meaningfulness = 3 | .102 .100 | * | 1.11 | .018 -.019 | n.s | 1.02 .99 |
| **Credibility** | | | | | | |
| Credibility = 1 | .045 .048 | n.s. | 1.05 | .014 .012 | n.s. | 1.01 |
| Credibility = 2 | .191 .192 | *** | 1.21 | .071 .070 | * | 1.07 |
| Credibility = 3 | .285 .290 | *** | 1.34 | .108 .067 | *** * | 1.11 1.07 |
| **Price** | | | | | | |
| Price (centred) | -.265 -.264 | *** | .768 | .071 .056 | *** | 1.07 1.06 |
| Product Category x Price | -.052 -.057 | *** | .946 | -.002 | n.s. | .998 |

Note: *$p < .05$, **$p < .01$, ***$p < .001$

**Fig. 2.** Predicted choice as a function of comprehension levels and consumer concern (see Table 2 for model coefficients)
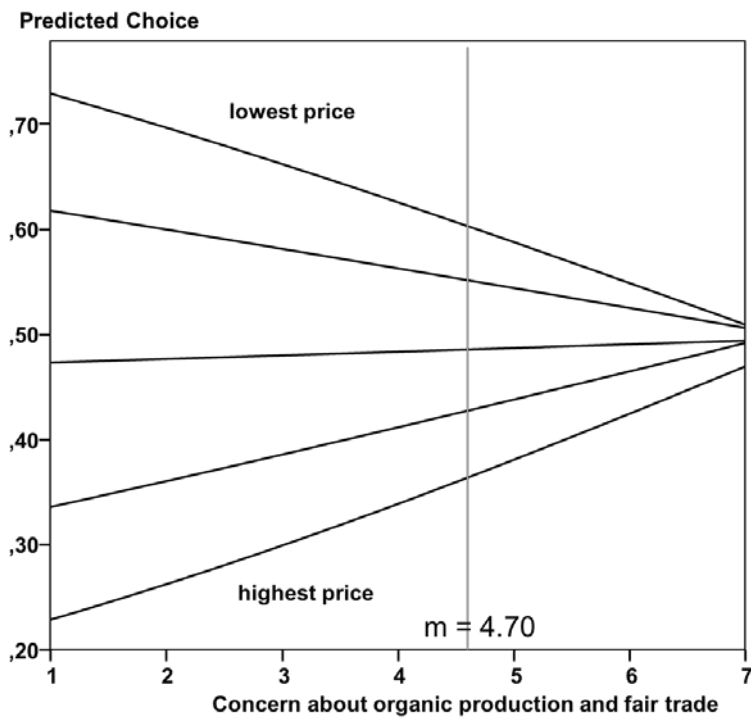


**Fig. 3.** Predicted choice as a function of credibility levels and consumer concern (see Table 2 for model coefficients)

Concerning $H_3$, credibility shows as well a main effect (global $F(3, 16.08) = 15.52; 16.05$) as a consumer difference interaction (global $F(3, 16.08) = 5.26; 2.91; p < .05$). Declaration by the producer failed to improve choices (see Table 2, predicted choice 47.6%), but governmental certification (predicted choice 49.9%), and traceability (predicted choice 50.9%) increased consumer's choices compared with the no credibility addendum (predicted choice 46.3%). Inspection of the standard errors of each credibility level b-parameter (se = .047) proved the ranking of traceability over governmental certification and the latter over a producer declaration to be significant, thereby supporting $H_{3a}$. In line with $H_{3b}$, the higher the consumers' concerns about, or expertise in organic and fair trade products, the lower their choice of products without a credibility source or credibility only granted by the producer, and the higher their choice of products with a governmental certification or the possibility to trace criteria fulfilment themselves. Again, Fig. 3 illustrates that ethically concerned consumers choose ethical products when they can rely on traceability, followed by governmental certification. In contrast, the choice probability of ethically concerned consumers decreased for self-declared labels and no credibility treatment.

Also price shows the expected results. Not only the lower the price, the higher consumer choices probability was (Table 2); in line with $H_{4a}$ a lower price was more important for the furniture category than for FMCG. Fig. 4a shows that consumers are generally less price sensitive for FMCGs compared with durable goods. Whereas this price times product category interaction was not further moderated by the consumer differences (global $F(1, 16.08) < 1$), the overall price sensibility was (global $F(1, 16.08) = 81.06; 54.54$, for concerns and expertise, respectively). Fig. 4b visualizes a near full extinction of price importance for highly concerned or adept consumers.
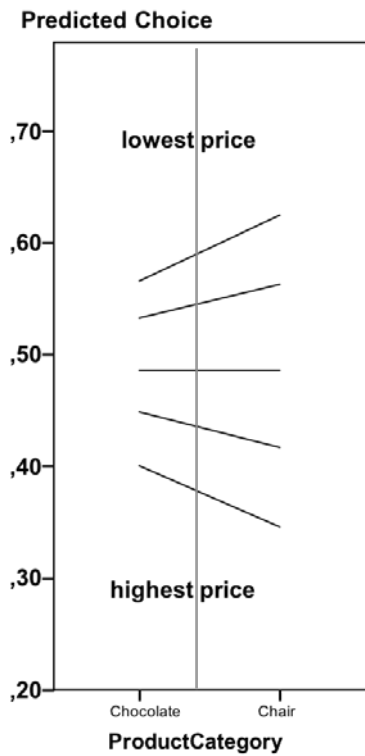
**Fig. 4a.** Predicted choice as a function of price levels and product category (see Table 2 for model coefficients)



**Fig. 4b.** Predicted choice as a function of price levels and consumer concern (see Table 2 for model coefficients)

**5 Discussion**

From a global perspective, ethical consumption is more important than ever before and several industries are under increasing pressure to provide products fulfilling ethical criteria and to disclose related product information. Though a growing consumer awareness about ethical consumption is reported, many consumer purchase choices do not yet take a product's ethical features into account. Hence, it must be identified how to overcome the 'Ethical Purchasing Gap' (Nicholls and Lee, 2006), with product communication being discussed as one important and promising tool. As the literature indicates that the communication of ethical product information plays an important role with respect to purchase decisions (Atkinson and Rosenthal, 2014), this paper examines which criteria must be specifically met in order to increase ethical consumption compared with the conventional approach to disclose general ethical information. Overall, it is argued that ethical product information must be communicated deliberately to consumers so that it enters into consumers' purchase decision processes and/or persuades them to consume ethically.

To identify important characteristics of ethical product information, McGuire's (1976) information-processing model is reviewed. Three information factors were identified, and the present study shows that each of them significantly influences the success of communicating ethical product information. Firstly, ethical product information must be easy for consumers to understand, e.g., by additional, enhanced explanation. While labels often rely on general claims such as 'organic' or 'sustainable', the present study shows that an enhanced explanation leads to more ethical choices being made by the consumer. Labels have often been criticised for their information scarcity (Borin et al., 2011), and this again points to the necessity of a well-elaborated information presentation. Currently, consumers perceive that they do not have sufficient information to make ethical purchase decisions (Bray et al., 2011), so presenting them with detailed information about ethical products that is easy to understand may help to address this perception, and thus increase ethical consumption behaviour.

Secondly, the given information must be meaningful for an individual consumer, i.e. going beyond 'organic', to include information which may be more pertinent to the individual such as local production or resource preservation. A consumer must therefore understand the relevance of including ethical criteria in their purchase decisions. This is particularly important since not all consumers have a high ethical obligation; ethical obligation rather presents a moral view that differs between individuals (Valor, 2008). Therefore it is crucial to identify meaningful ethical-related information as part of the promotion strategy. Additionally, these related items may also function as an indicator of other credence attributes, such as health and safety features which may provide consumers with reassurance about product quality.

Thirdly, it is necessary that consumers perceive ethical product information as credible. This becomes particularly important in light of ongoing greenwashing attempts, which also include new forms of greenwashing such as "deceptive manipulation", represented by the Volkswagen Dieselgate scandal (Siano et al., 2017). Given this, it is essential that consumers perceive the source as both competent and trustworthy (McGuire, 1976). Results show that government and independent third-party certification and notably traceability systems increase the instances of consumers' choosing ethical products. The preference of governmental and independent third-party certification over self-declaration as well as the highest choice probabilities for traceability are also in line with previous studies (e.g., Ortega et al., 2011), which take into account the different certifiers: The higher choice probabilities for Type I and particularly Type III (if traceability is perceived as most similar to Type III labels) may be explained by an increase in consumers' trust, as previously indicated. Consumers' mistrust in a certification can represent a purchase barrier (Nuttavuthisit and Thøgersen, 2015). However, as indicated by this study and previous research (e.g., Bradu et al., 2014), consumers seem to particularly trust traceability, indicating that this source might represent the most effective method to increase consumer trust. However, the mentioned mediator trust (i.e., perceived credibility) was not assessed.

Finally, in this study a sophisticated presentation of ethical product information was accompanied by varying the product price, clearly demonstrating price as an important attribute for purchase decisions. In line with previous research (Cai and Aguilar, 2013), consumers were more price sensitive for durable goods than for FMCGs in general, however, this does not apply to committed ethical consumers. Hence, there seems to be great potential when promoting durable goods to an eco-niche target market.

Another important result of the study is that individual differences systematically moderated the effect of the information factors. The outcome of the treatments was intensified for two out of the three factors, confirming that an elaborated product communication is more essential for both concerned consumers, and consumers with expertise in ethical consumption. The only interaction that failed to reach significance was the one with meaningfulness variation. Meaningful information must be provided for consumers in general but not particularly when targeting the described segment.

The results overall strongly suggests that advertisers and marketers can customize and shape product communications in order to engage either the mass market, or a special eco niche. At the same time, the applied methodology provides practitioners with a guide, that helps to determine which product information should best be disclosed for ethical products. Additionally, the present study indicates that tracking technology has the potential to dramatically shift the way in which the advertising and marketing communications industries design product information, particularly when targeting ethical consumers. Advertisers can tailor and enhance product communications in order to engage those consumers desiring information that is meaningful to them, in addition to providing information that is more relevant to the mass market. Through the presentation of comprehensible, meaningful, and credible ethical product information, businesses may gain competitive advantage over those businesses that do not engage in such elaborated communication. Considering the three identified factors of product communication allows businesses to address consumers expressed and unexpressed ethical (-related) needs, and demonstrates that these needs are taken seriously.

But before applying the results, limitations of the present study must be considered. Effect sizes were only small (Odds Ratio < 2), indicating the narrow competition of the factor levels in only 14 CBC choices per respondent. However, interestingly, the b – parameter of a price change of 15% was of comparable size to the favourable treatments, i.e., the latter arrive at relevant price equivalences. Secondly, all offers were at least marked as 'organic and fair trade'. Hence, future research is needed to show to what extent an elaborated framing of ethical messages results in more ethical choices compared with conventional alternatives. It may be informative to replicate the advantages of comprehensibility, meaningfulness and credibility over the mere label when the offers compete with conventional and consistently cheaper offers. Thirdly, future studies may also focus on how the identified requirements of a successful presentation of ethical product information may best be met for more diverse product categories. Depending on product category, future research could explore which ethical-related information is really meaningful for the target market. For each category, the precise information which helps consumers to capture the full meaning which is important to them, should also be determined. Clearly, information depth and breadth may vary subject to purchase decision involvement. Furthermore, like many other studies this research relies on the assumption that marketing communication can influence ethical consumption. The existence of other drivers of ethical purchasing must nevertheless be acknowledged such as political factors, ambiguities, product availability and quality. The antecedents of credibility also need further clarification, as suggested by Leire and Thidell (2005) and Thøgersen (2000).

Additionally, future research could assess which medium should be chosen to deliver ethical product information to consumers. While labelling has been used for a long time, a traceability based product information retrieval system appears as a promising new approach. The principal idea is that consumers have access to extensive and detailed product information, e.g., by a technology-based information retrieval at the point of sale (Hobbs et al., 2005). Compared with place restrictions on product packaging, the traceability system approach allows more information to be made available to consumers (Osburg et al.,

2016a) in order to communicate ethical product information in an understandable, meaningful, and trustworthy manner. Contemporary consumers are very familiar with technology and expect information searches to be simple and revealing. Traceability systems are likely to be an excellent tool for advertisers to employ in order to increase consumer involvement and engagement, particularly for high involvement purchases.

## 6 Conclusion

Ethical consumption is becoming increasingly important, and businesses are starting to invest in the advertising of ethical goods and services. However, current consumption patterns do not yet sufficiently reflect consumers' ethical considerations. Fortunately, as this research shows, businesses can foster ethical consumption through an elaborated framing of ethical product information. Our data reveal that marketing communications should take into account specific characteristics (comprehensibility, meaningfulness, and credibility) when designing ethical product information. The proposed framework helps to shape product communication in a way to increase ethical purchases by either targeting the mass market, or a special eco niche.

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