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# It's a consumer's idea, you must like it: The efficacy of created-by-consumer cues in market communication



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Es lässt sich beobachten, dass Unternehmen Konsumenten nicht nur dafür heranziehen, um Ideen für neue Produkte zu generieren, sondern diesen Tatbestand auch bewerben, indem sie auf Produktverpackungen auf die Quelle der Idee hinweisen. Die bisherige Forschung wies nach, dass diese Information nur dann Kaufabsichten beeinflusst, wenn das Instrument für Produkte mit geringer Komplexität und Statusrelevanz genutzt wird. Wir untersuchen die Relevanz zweier weiterer Bedingungen: die Typikalität des Produkts und das Vorhandensein von Reizen, die die Ähnlichkeit zwischen Quelle der Idee und Käufer aufzeigen. Unsere Studie zeigt, dass „Created-by-Consumer Cues“ nur dann Kaufabsichten beeinflussen, wenn damit atypische Produkte beworben werden.

*An increasing number of companies use the fact that the ideas for their new products are consumer-generated for communication purposes to affect purchase intentions. Prior research has found that the effectiveness of this measure is limited to products with low complexity and low potential to affect the social status of their users. We consider two additional factors that might restrict the effectiveness of created-by-consumer cues: product typicality and the presence of cues that indicate similarities between the consumers whom the company wants to buy the product and the consumer who created the idea for the product. Low product typicality was determined to be an important condition for the effectiveness of created-by-consumer cues.*

## 1. Introduction

### 1.1 Use of consumer-created ideas

Companies motivate consumers to provide ideas for new packaging and new products. For instance, Fanta started the “Germany needs more fantasy” campaign on the Internet and asked consumers to create new labels for bottles of its soft drink. The company promised to introduce into the market bottles with consumer-created label designs as special editions ([fanta.de/fantasie](http://fanta.de/fantasie)). Nescafé Dolce Gusto started a “Euro Design Contest” by

asking consumers in several European countries to provide suggestions for the painting of its coffee machine named Melody (dolce-gusto.de/de/facebookcontest). In 2011, when Fiat planned to re-launch the Fiat 500, the company asked consumers to provide ideas for the painting of the car body, the wheel rims, etc. The retailer Tchibo asks consumers to report ideas for new products that can be sold in its outlets. Experts from Tchibo judge the ideas, and when they evaluate them favorably, the company develops and produces the respective products. The creator of the idea receives a share of the profits resulting from the product's sales. Selected ideas are also shown on the Internet in a "Hall of Fame" (tchibo-ideas.de/dein-design/realisierte-produktideen). Prior research has shown that employees of R&D departments and external experts frequently evaluate the innovativeness and customer-need orientation of consumer-created ideas as comparatively high (Dahl *et al.* 1999; Nishikawa *et al.* 2013; Franke *et al.* 2014). However, these practitioners also see disadvantages in consumer-created ideas when the question of how to realize such ideas, i.e., how to implement them in feasible products, must be answered (Kristensson *et al.* 2004; Poetz/Schreier 2012).

In addition to benefitting from consumer-created ideas in R&D departments, some companies use the fact that a new product is actually based on a consumer-created idea as a cue to signal the source of the creation to consumers who they want to buy the product. In this paper, we focus on such benefits for communication purposes. We show some examples of the use of created-by-consumer cues in the German market for new products as a market communication tool in *Figure 1*. For instance, Ritter Sport marks bars of chocolate that have been created by consumers in an online blog as "Blog" chocolate. The retailing company Edeka denotes a special line of products that are based on consumer ideas as "Selbermacher" (which can be translated as "made by you"). Lego inserts the statement "Designed by Lego fans" on the left side of the packaging of consumer-created toys. Dr. Scheller Cosmetics offers the nail polish "Manhattan Birthday Colours" that is "created by fans." This information is stated on each product's back side. McDonald's promotes consumer-created hamburgers in Germany. In the U.S. market, the fashion label Threadless sells consumer-created T-shirts. On its online shopping mall, below the depiction of the products, the name of the consumer who created the design is mentioned. These examples illustrate that some companies not only collect ideas for new products from consumers but also use this activity to promote their products with more or less visibility. To provide an example of a higher degree of visibility, we refer to the case of Homann, which is a brand of the Theo Müller Group (*Figure 2*). This company accompanies the use of a created-by-consumer cue with a considerable advertising effort. A celebrity announces the beginning of an annual contest for ideas for a new potato salad, and after the contest has ended, the company uses a portrayal of the winner as a testimonial in an ad campaign and provides her/his name and photo on the product's packaging. By doing so, companies use such created-by-consumer cues as signals that are obviously largely aimed at affecting consumers' perceptions and evaluations.

These examples illustrate that the use of created-by-consumer cues is a means of marketing communication that has gained increasing attention from marketers.

### 1.2 Prior research on the communication effectiveness of created-by-consumer cues

The effects of created-by-consumer cues on perceptions, evaluations, and purchase intentions have been extensively researched by Schreier, Fuchs, and their co-authors (Fuchs/

(Schreier 2011; Schreier *et al.* 2012; Fuchs *et al.* 2013). Below, we summarize the key findings of these studies to build on them and identify a gap within this field of research.

The authors reported that the overall effect of created-by-consumer cues on brand attitudes and purchase intention is mixed. They found positive effects on consumer perceptions of innovativeness and customer-need orientation and a negative effect on perceptions regarding the quality of the resulting products. It could be added that these types of effects of created-by-consumer cues have also been found for other objects, such as consumer-created commercials (Lawrence *et al.* 2013; Thompson/Malaviya 2013). Moreover, it should also be noted that different authors have used different terms to denote these effects. For instance, Kristensson *et al.* (2004) denoted the dimensions as perceptions of the new product's originality, value, and realization. Below, we summarize the arguments and findings regarding these response variables.

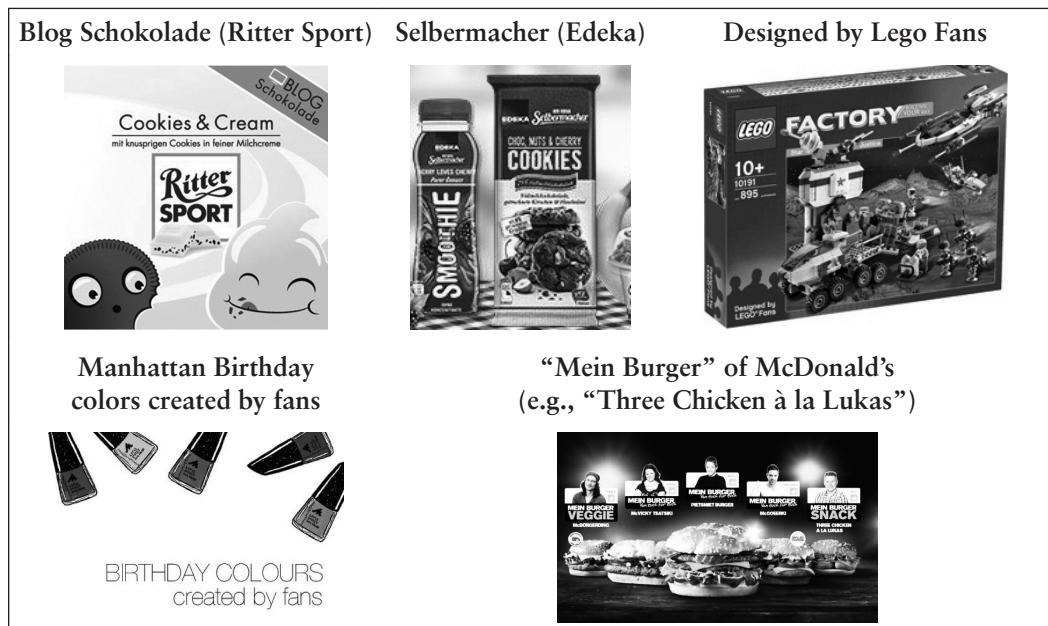


Figure 1: Examples of created-by-consumer cues used in communication practice

Celebrity announces the contest in advertisements



Company uses the winner as a testimonial in advertisements



The winner's name and picture are depicted on the packaging



Figure 2: Elements of the “Mein Leckerster für Deutschland” campaign of Homann’s potato salad

*Perceptions of innovativeness* (the extent to which the underlying idea is innovative): Schreier *et al.* (2012) hypothesized that consumers infer higher innovativeness from created-by-consumer cues. Consumers may believe that products that are based on consumer-created ideas are the result of a higher number of ideas compared with products that are based on company-created ideas; thus, the likelihood of a highly innovative idea could be higher with a greater number of ideas. Moreover, consumers could believe that there are fewer constraints in consumers’ role as creators: consumers can follow their vision and let their ideas run free. Additionally, consumers could believe that other consumers who provided ideas for a new product are more similar to themselves than the professionals employed in R&D departments. Thus, consumers may be more prone to attributing positive characteristics such as innovativeness to similar others. Fuchs/Schreier (2011) investigated the effect of the communicated source of product creation (consumer vs. company) on consumer perceptions of product innovativeness for new T-shirts, furniture, and bicycles; they found higher perceptions for the case of furniture but a null effect for T-shirts and bicycles.

*Perceptions of need orientation* (the extent to which there is a real need for this type of product): The argument that consumers perceive higher commonality between other consumers who assumed the role of creators of product ideas and themselves than between professional creators and themselves can also be used to predict more favorable beliefs about the customer-need orientation of products that are based on consumer-generated ideas. Consumers could presume that other consumers who act as creators have deeper insights into consumers’ real needs. Thereby, products based on consumer-created ideas may be perceived as more need-oriented, i.e., more suitable to adequately satisfy consumer needs. Fuchs/Schreier (2011) successfully tested this presumption for new T-shirts, furniture, and bicycles.

*Perceptions of product quality* (the extent to which the underlying idea can be translated into a high-quality product): There is a difference between the need for a type of product and the executional quality of a special product of this type because it may be difficult to transform a valuable idea into a high-quality product. For instance, consumers who act as creators may highly value the taste of certain fruits and use this knowledge to generate

ideas for new types of ice cream, chocolate, or soft drinks, but it may be difficult for a company to implement these tastes in the respective products. Consumers may believe that consumers as a source of idea creation lack the knowledge, training, and experience about what ideas can be implemented into products (Moreau/Herd 2010). Fuchs *et al.* (2013) focused on the latter aspect for luxury apparel brands. They found a negative effect of information that an idea was consumer created (vs. company created) on consumer perceptions of product quality.

These authors have also considered a set of factors that might increase or reduce the effect of created-by-consumer cues on perceptions of innovativeness, need orientation, and product quality. The party that creates ideas (consumer vs. company) can differ from the party that selects one of the ideas as the input in the product development process (consumer vs. company). By combining these factors, different levels of consumer empowerment result. Fuchs/Schreier (2011) did not find that the denoted party who selects among the ideas increases or decreases the effect of the source of idea creation on perceptions of innovativeness and need orientation for new T-shirts, furniture, and bicycles (for research on the effect of forms of consumer-company cooperation, see *van Dijk et al.* 2014; Kazadi *et al.* 2013). It should be noted that this finding is important for practice because empowering consumers to select among all consumer-created ideas can “result in a PR disaster” (Breithut 2011). For instance, the Henkel company started a contest called “Mein Pril, mein Stil” (my Pril, my style) on Facebook that empowered consumers to create ideas for the packaging label for its dish liquid and additionally to select among all submitted ideas. A package design that showed a grilled chicken and contained the message “Tastes like a delicious chicken” received the most votes. The rejection of this result by the company annoyed consumers.

Schreier *et al.* (2012) investigated the effect of the communicated source of a product’s ideas on perceptions of innovativeness and found that this effect existed for low-complexity products (e.g., T-shirts) but was absent for high-complexity products (e.g., robotic toys). Schreier *et al.* (2012) also tested the moderating role of the familiarity of the targeted consumers with user innovations. For the high-familiarity condition, they found a positive effect of the created-by-consumer cue on perceptions of innovativeness. In the low-familiarity condition, this effect was absent. Fuchs *et al.* (2013) tested the moderating role of the relevancy of a product to purchasers’ social status. Overall, they found a negative effect of a created-by-consumer cue on perceptions of product quality, which was even more negative in the high-status-relevancy condition.

To summarize, the research of Schreier, Fuchs, and their co-authors laid the foundation for analyses about the effectiveness of using created-by-consumer cues for the purpose of marketing communications. The findings indicate that these cues affect perceptions of innovativeness and need orientation positively in the conditions of low product complexity and consumer familiarity with user innovation and affect perceptions of product quality negatively in the condition of high status relevancy of the product.

### 1.3 Gap in the research

We showed the images as they are depicted in *Figures 1* and *2* to a small sample of students and colleagues and asked them to report their spontaneous thoughts. These people consistently tried to ascertain the special characteristics of the created-by-consumer products that are likely absent from created-by-company products. They asked themselves,

“What features or benefits make this product different?” For instance, in the case of the potato salad, “Why is merely adding pieces of cheese, sausage, and apple to a potato salad an idea that should be used to promote this type of product as consumer-created?” This aspect motivated us to consider created-by-consumers cues from the perspective of signals of quality.

When companies use created-by-consumer cues to communicate certain qualities of their products to consumers, these signals must meet two basic requirements to be effective. First, consumers have to infer from the cue that the product features and benefits – taken together – are favorable. Second, consumers have to believe that the company is not misusing the signal, e.g., it does not use a created-by-consumer cue when the idea is trivial. The cue-utilization model that was originally suggested by Cox (1967) and was further developed by numerous additional authors postulates that any signal has to have a high confidence value as well as a high predictive value to be effective (e.g., Olson 1978; Rao/ Monroe 1988; Pechmann/Ratneshwar 1992; Broniarczyk/Alba 1994; Baumgartner 1995). The confidence value is a “measure of how certain the consumer is that the cue is what s/he thinks it is.” The predictive value is a “measure of the probability with which a cue seems associated with (i.e., predicts) a specific product attribute” (Cox 1967, 331). Prior research on the effectiveness of created-by-consumer cues seemingly focused on the cue’s value to predict product features and benefits such as innovativeness, need orientation, and executional quality and did not consider factors that might affect the cue’s confidence value. We expect that consumers presume that companies could also misuse this cue as a marketing tactic to influence evaluations of products that are based on trivial ideas. Thus, our first contribution to this stream of research is our consideration of a fourth mediating variable that we denote as company trustworthiness. We presume that a low product’s typicality is a condition that decreases unfavorable beliefs about low company trustworthiness when a created-by-consumer cue is used.

Furthermore, the pictures contained in *Figures 1* and *2* show that some companies, such as McDonald’s and Homann, add information about the creator. In these cases, the name of the consumer is mentioned and her/his photo is depicted. Thereby, higher perceptions of similarity between the consumer and the person who created the idea may be generated. Especially in the case of McDonald’s, where numerous consumers who created burgers are shown, a higher chance exists that the targeted consumer finds somebody who looks similar to the own person. The combined use of created-by-consumer and similarity cues in practice prompted us to also consider this aspect.

In related research, Thompson/Malaviya (2013) manipulated perceptions of similarity between the consumer and the source of the creation of a new commercial by either providing or not providing information to students as the targeted audience that the creator was also a student. The authors found lower skepticism regarding the executional quality of the consumer-created commercial in the high-similarity condition. Thus, we presume that additional pieces of information that indicate high similarity between the consumer as the source of the idea for the new product and the audience could foster the effect of created-by-consumer cues. Targeted consumers might see commonality with the creator and, thus, elicit more favorable perceptions regarding the product features and benefits. Dahl *et al.* (in press) reported that female consumers who obtain information that a “consumer-driven” firm relies on ideas from other female consumers (as opposed to male consumers) responded more favorably to the firm’s products. Thus, our second contribution is testing

whether the presence of similarity cues can enhance the effect of created-by-consumer cues on purchase intention even when the company is not considered “consumer-driven.”

Because prior research has shown that created-by-consumer cues are effective in conditions of low product complexity and low status relevance, we limit our investigations to these types of products. Thus, our study tests the parts of the model that are highlighted in grey in *Figure 3*.

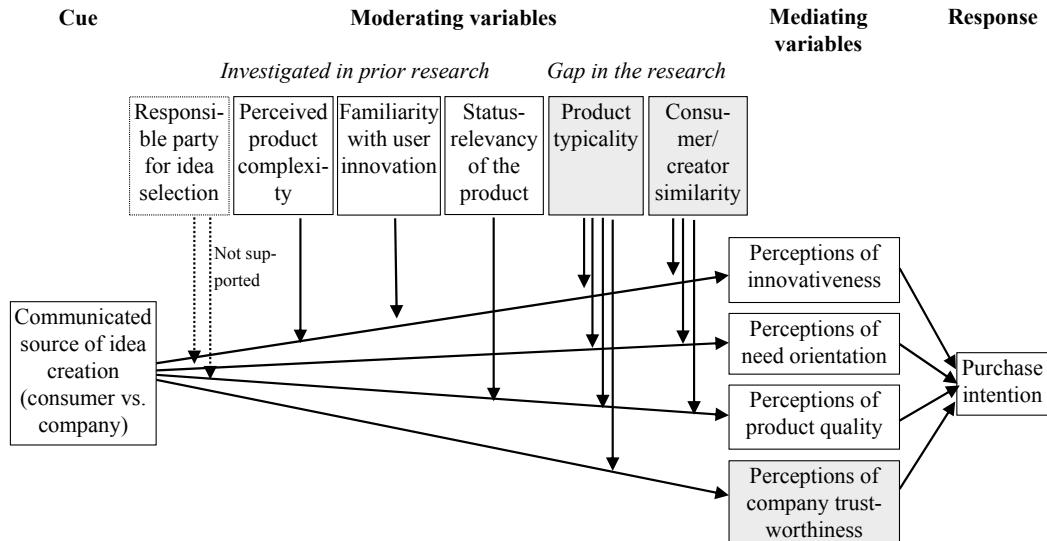


Figure 3: Contribution of our investigation to prior research

## 2. Theoretical considerations

Prior research has provided evidence that the communicated source of a new product’s idea positively affects perceptions of product innovativeness and need orientation and negatively influences perceptions of executional quality. Thus, we do not discuss these responses in detail. Moreover, there should be no doubt that using created-by-consumer cues could also affect perceptions of a firm’s trustworthiness. Therefore, we focus on discussing the moderating variables, i.e., product typicality and the similarity between the targeted consumer and the consumer who had the idea for the new product.

### 2.1 Product typicality

Rosch/Mervis (1975) define a prototype as the clearest case of the example of the category. In line with this fundamental definition, Hekkert *et al.* (2003) consider two dimensions of a product’s appeal: typicality and novelty. A product is denoted as typical (vs. atypical) when its observer regards it as a good (vs. poor) example of the category the product belongs to. A product is novel (vs. not novel) when the product has (vs. does not have) original features. To illustrate the distinction, they refer to a table lamp. A table lamp could be seen as a typical or an atypical example for the lamp category due to its overall form. Moreover, this lamp could possess or not possess novel features (e.g., can contain a special synthetic material). In this sense, Hekkert *et al.* (2003) use the product design (i.e., the

overall form) to categorize products into typical and atypical variants and all other product features (e.g., the kind of materials) to differ between low and high product novelty. *Landwehr et al.* (2013) use a more general approach and define (proto-) typicality as the extent to which an item represents the average values of the features of that category. We adopt this general approach and do not interpret design characteristics as the only source of typicality. In line with *Hekkert et al.* (2003), we denote a product as atypical when the design plays the major role in that category (e.g., furniture, textiles, and shoes) and when this product's overall design is perceived as atypical. However, for categories where ingredients are the key feature (e.g., in the categories of chocolate, cereals, and potato salad), we denote products as atypical when they are composed of fancy ingredients.

We hypothesize that the effect of created-by-consumer cues on perceptions of innovativeness and need orientation are stronger for atypical products. As a theoretical basis for this hypothesis, we can refer to theories that deal with the effect of fit, because the combination of an unusual cue such as a created-by-consumer cue with a low-typicality product creates a fit condition. There is no general theory on the effects of fit or of similar concepts such as consistency, match, or congruency. For instance, in the field of advertising research, the researchers found a positive effect of fit between the characteristics of a celebrity (her/his recommendation was the cue in that case) and characteristics of the promoted product on product evaluations. In this field, *Kamins/Gupta* (1994, 571) argue that fit results in higher perceptions of the believability of the cue. When this argument is transferred to our issue, one could expect that fit resulting from the unusualness of the cue (i.e., the created-by-consumer cue) and the low-typicality of the product increases the belief that the product is actually consumer-created. A similar proposition can be derived from additional areas of research where the concept of fit is prevalent (e.g., regulatory fit, see *Higgins* 2000). The authors presume that fit elicits "feeling right" (*Higgins et al.* 2003). Researchers in this field argue that people mistakenly use the "feeling right" as a piece of information about the target stimulus (e.g., *Schwarz* 2006). In our case, this proposition predicts that fit increases the consumer's confidence that s/he correctly attributes the product's idea to its source (company or consumers). Combining this argument with the propositions of *Schreier et al.* (2012) about perceptions of innovativeness and need-orientation of consumer-created ideas of products (see *Section 1.2*), perceptions of product innovativeness and need-orientation are expected to be higher under the condition of fit. Finally, we can refer to the theory of schema incongruence developed by *Mandler* (1982). If people are capable of finding an explanation (e.g., "The product is really atypical") for the use of an unusual cue (such as a created-by-consumer cue), they could experience a positive feeling of success (due to understanding the cue) that spills over positively onto perceptions of innovativeness and need orientation. Similarly, *Meyers-Levy/Tybout* (1989, 40) argue as follows: When people are capable to resolve incongruity (i.e. in our case, find an answer to the question why the company uses an unusual cue), this process "is thought to be rewarding and thus may contribute to the resulting positive affect." Moreover, these authors infer on more favorable product evaluations in the condition of resolved incongruity. Thus, we test the following:

*H1a: The positive effect of a created-by-consumer cue on perceptions of innovativeness is higher for atypical (compared with typical) products.*

*H1b: The positive effect of a created-by-consumer cue on perceptions of need orientation is higher for atypical (compared with typical) products.*

However, from the targeted consumers' perspective, it may be more difficult for a company to implement ideas for atypical products from other consumers among high-quality products. Consumers could view an atypical product that is denoted as consumer-created as a gimmick that is not associated with a high level of benefits such as durability or taste. To provide an argument in favor of the presumption that consumers likely consider consumer-generated ideas for atypical products as gimmicks, we can refer to learning processes of consumers which are elicited by reports of mass media (e.g., Moschis/Moore 1984). To entertain their audience, mass media frequently report that consumers generate ideas that result in atypical and gimmick-like products. For instance, media made fun of McDonald's "burger battle." In this campaign, the company had asked consumers to design burgers and vote for these variants. Among the burgers which received most votes was the "HSV burger – hat nix drauf" which primarily aimed to mock the poor performance of a soccer club located in Hamburg ([youtube.com/watch?v=OlOnPbX3HIE](https://www.youtube.com/watch?v=OlOnPbX3HIE)). As already mentioned in the introductory section, consumers suggested introducing dish liquid with the smell of a chicken and voted for it. Because mass media draw the attention to such cases, consumers could have learned that consumer-generated ideas for products that are atypical (e.g., a plain hamburger or dish liquid with inadequate smell) are intended as gimmicks which cannot be transformed into high-quality products. Thus, we expect the following:

*H1c: The negative effect of a created-by-consumer cue on perceptions of product quality is even higher for atypical (compared with typical) products.*

Created-by-consumer cues are not unknown cues but are cues that have been seldom used until now. Thus, if consumers encounter a created-by-consumer cue, it likely attracts their attention because this type of cue is rarely used. This attention is encouraged when companies accompany this piece of information with an advertising campaign (see *Figure 2*). Consumers are likely skeptical about cues that attract their attention but that are rarely used. They may guess that companies could use such cues as a marketing tactic to influence product evaluations because otherwise, many other companies would use the same cue to sell products. *Thompson/Malaviya* (2013) also highlighted this aspect and referred to the persuasion-knowledge model developed by *Friestad/Wright* (1994), which states that consumers are aware of companies' attempts to affect their responses. To summarize, consumers could raise the question whether a created-by-consumer cue is used with manipulative intent.

Consumers could answer this question in the affirmative when companies use created-by-consumer cues to promote typical products. Consumers may ask themselves, "Why is the company using this unusual cue to describe a common product that is based on a trivial idea?" Consumers may search for reasons why they should resist this cue, which may result in an impression such as, "The product is not actually based on the best ideas that consumers are able to generate." Thus, in terms of the cue-utilization model, the cue's confidence value is low. To provide a theoretical explanation, we can refer to the theory of piecemeal information processing (*Fiske/Pavelchak* 1986). Because created-by-consumer cues have been rarely used to date, the use of the cue attracts attention ("There must be something special"). Therefore, the consumer is likely to check the product attribute-by-

attribute to identify special features. Because s/he fails in the case of a typical product, s/he is likely to infer manipulative intent.

On the contrary, consumers might answer the question in the negative when companies use created-by-consumer cues to promote atypical products. In other words, perceptions of manipulative intent might be reduced or even inhibited if a created-by-consumer cue is used to describe an atypical product that is seemingly special. The consumer may then understand the reason why the company uses such a cue: “The company wants me to know that the product is something special.” At least, consumers should have little or no doubt when they are exposed to an atypical product that is characterized as consumer-created. Thus, we expect the following:

*H1d: For typical products, there is a negative effect of created-by-consumer cues on perceptions of company trustworthiness. For atypical products, this effect is less negative or absent.*

### 2.2 Consumer/creator similarity

In general, individuals tend to assign favorable attributes to other similar people and less favorable attributes to other dissimilar people (Byrne 1971). The argument for this similarity-attraction effect is as follows: Individuals usually assign positive characteristics to themselves to maintain and enhance their self-esteem. When other people are similar to one's self-regarded attributes that can be easily recognized (e.g., age, style of dress, and ethnicity), individuals also infer positive attributes regarding further characteristics that cannot be easily assessed (e.g., trustworthiness and skills). Thus, people overestimate the favorable qualities of similar compared with dissimilar others (for similarities regarding social aspects, see Tajfel/Turner 1986). Thus, when cues are used that increase perceptions of similarity between a consumer and the person who created the idea for a new product, more favorable characteristics may be attributed to this person (e.g., creativity, diligence, and accuracy). Thereby, perceptions of product innovativeness, product need orientation, and product quality could increase. Besides the similarity-attraction hypothesis, there are numerous additional theories that focus on the social influence of similar others. For instance, Chang (2012) summarizes approaches that can be used to predict that the effectiveness of recommendations by other consumers is contingent on the similarity between the consumer and the people who make the recommendations. Dahl *et al.* (in press) investigated the effect of information that a company is driven by a user community whose members are more or less similar to the targeted consumer (same or opposite gender) on product evaluations. These authors use the social identity theory (Tajfel 1982) to predict a positive effect of similarity. In short, this approach suggests that similarity induces feelings of belongingness. These positive feelings could spill over onto evaluations. Thus, we test the following:

*H2: Similarity cues enhance the positive effect of created-by-consumer cues on (a) perceptions of innovativeness and (b) need orientation and reduce the negative effect of these cues on (c) product quality.*

### 3. Empirical study

#### 3.1 Experimental design

We created print advertisements that depicted a single product, mentioned the brand name, and denoted the source of the creation of the idea for the product. The advertisements were systematically varied. We used a 4 (communicated source of the new product's idea: no information, company, consumer, or student)  $\times$  2 (product: typical or atypical)  $\times$  4 (brand: Milka, Alpia, Nine West, or Adidas) factorial between-subjects design. The depicted products are shown in *Figure 4*. The products were chosen on the basis of pre-test results to identify representatives for the categories of typical products and atypical products. In the case of the chocolate brands, we consider bars of chocolate containing fancy ingredients as atypical products. In the case of the shoe brands, we consider the overall design as the source of typicality as it has been suggested by *Hekkert et al. (2003)*.

	Milka	Alpia	Nine West	Adidas
Atypical products				
	Chocolate with flavored jelly, crisp colorful cocoa lenses, and tingling "Knissterstückchen"	Chocolate with cream and pitaya	Platform shoes that look like high heel shoes	Sports shoes in denim with a wing design
Typical products				
	Chocolate with milk and honey	Chocolate with milk and honey	Classical high heel shoes	Classical sports shoes

*Figure 4: Test stimuli used in the experiment*

#### 3.2 Measures

To assess perceptions of innovativeness, we adopted two statements from *Fuchs/Schreier (2011)* and added an additional statement: we asked the test participants to agree or disagree with the statements "The product is unique," "The product is new," and "The product is something special" ( $\alpha = .810$ ). Because the test participants were exposed to the images of the test products and received the information that these products are available on the market now, they unlikely misinterpreted these statements as measures to assess whether the products are luxury or individualized items. To measure perceptions of need

orientation, we also used items suggested by *Fuchs/Schreier* (2011): the participants were asked to respond to the statements “The company has the customers’ best interest in mind,” “The company tries to figure out what customers’ needs are,” and “The company tries to find out what types of products would be most appealing to customers” ( $\alpha = .828$ ). To assess perceptions of product quality, the participants were asked to agree or disagree with the statements “The product has high quality,” “The product is good”, and “The product’s quality is attractive” ( $\alpha = .781$ ). Perceptions of company trustworthiness were assessed by asking the test participants to agree or disagree with the statements “The message is convincing,” “The message is appealing,” and “The message is honest” ( $\alpha = .757$ ). Finally, the participants indicated their purchase intention by agreeing or disagreeing with the statement “I would buy this product.” All scales were seven-point scales.

### 3.3 Sample

A large number of students who worked on their diploma thesis, bachelor’s thesis, or master’s thesis or conducted an independent study helped us to collect the data. The students mostly used online communities such as Facebook to distribute versions of the questionnaire in Germany. Data collection took place between March 2013 and March 2015. We excluded data from the sample when indications were that the test participant was not a student. Moreover, we only considered responses of females in the case of the Nine West brand shoes. By doing so, 4,679 respondents remained in the final sample. This procedure resulted in a large sample size ( $M_{age} = 23.2$  years, 76.8% female), but we cannot guarantee that some of the respondents did not complete the questionnaire for more than one of the 32 experimental conditions that resulted from our experimental design. Due to this procedure, the cell sizes differ from condition to condition. We collected the data brand-by-brand meaning that, for instance, we first collected data for the Adidas brand. Thus, the period of data collection for each brand was rather short (approximately six months). We do not expect that the results changed within this span of time.

### 3.4 Description of the data

In *Table 1*, we summarize the mean values of the response variables depending on the communicated source of the idea and the typicality of the new product.

		Communicated source of creation of a typical product				Communicated source of creation of an atypical product			
		No information	Company	Consumer	Student	No information	Company	Consumer	Student
Perceptions of innovativeness	Milka	3.87	3.85	4.19	4.21	4.28	4.14	4.63	4.78
	Alpia	3.07	3.39	3.77	3.87	4.06	4.10	4.77	4.89
	Nine West	3.38	3.09	3.18	3.65	4.38	4.29	4.85	5.07
	Adidas	3.36	3.11	3.31	3.36	5.05	4.92	5.45	5.31
	Total	3.44	3.37	3.69	3.68	4.42	4.29	4.83	5.07
Perceptions of need orientation	Milka	3.98	4.22	4.47	4.68	3.82	3.78	4.37	4.45
	Alpia	3.78	3.81	3.87	3.81	3.53	3.66	4.19	4.28
	Nine West	3.33	3.21	3.68	4.05	2.91	3.19	3.92	4.01
	Adidas	3.31	3.06	3.46	3.72	3.00	2.84	4.10	4.06
	Total	3.60	3.62	3.93	4.00	3.39	3.43	4.19	4.19

		Communicated source of creation of a typical product				Communicated source of creation of an atypical product			
		No information	Company	Consumer	Student	No information	Company	Consumer	Student
Perceptions of product quality	Milka	4.72	4.86	4.33	5.22	4.46	4.06	2.98	4.20
	Alpia	4.27	4.31	4.29	4.37	3.99	3.98	3.40	4.31
	Nine West	4.10	3.93	4.29	4.12	3.52	3.50	3.00	3.76
	Adidas	3.90	3.99	4.31	4.38	3.21	3.29	2.94	3.20
	Total	4.23	4.29	4.31	4.50	3.88	3.76	3.13	3.71
Perceptions of company trustworthiness	Milka	4.64	4.82	4.45	5.10	4.40	4.26	4.43	4.42
	Alpia	4.54	4.41	3.42	4.55	4.27	4.35	4.59	4.65
	Nine West	4.23	3.74	3.24	4.35	3.81	3.89	4.15	4.21
	Adidas	3.75	3.83	3.46	4.18	3.47	3.56	3.90	3.78
	Total	4.24	4.23	3.70	4.47	4.04	4.07	4.36	4.14
Purchase intention	Milka	4.63	4.68	4.83	4.96	3.72	3.62	4.44	4.65
	Alpia	4.41	4.41	4.37	4.77	3.98	3.93	4.15	4.25
	Nine West	3.30	3.01	3.29	3.32	2.40	2.21	3.53	3.64
	Adidas	2.82	2.87	3.29	3.24	1.97	2.00	3.30	3.29
	Total	3.73	3.83	4.09	3.89	3.13	3.06	4.01	3.85

Note: Scales range from 1 (low) to 7 (high).

Table 1: Mean values of the response variables depending on the moderating variables

### 3.5 Preliminary investigations

Before we tested the hypotheses, we conducted some preliminary analyses.

#### 3.5.1 Manipulation check of product typicality

In this section, we test whether we manipulated the product-typicality factor successfully.

We analyzed the responses of consumers to products that were denoted as recent introductions into the market. Hence, consumers could recognize a certain degree of innovativeness due to the short time the product is already available. Another source of perceptions of innovativeness is the extent to which the new product is typical vs. atypical for its category. For instance, *Hekkert et al.* (2003) states that a high (negative) correlation between typicality and novelty (in the sense of innovativeness) is expected to exist. As a consequence, we are able to infer a successful manipulation of typicality when the atypical products are perceived as more innovative than the typical products. We collapsed the data across the source of product creation and the brand factor and calculated perceptions of innovativeness. The mean values differed significantly ( $M_{typical} = 3.55$ ,  $M_{atypical} = 4.64$ ,  $t_{4,677} = 27.427$ ,  $p < .001$ ).

Thus, we can assume that this manipulation worked as intended.

#### 3.5.2 Interaction of source of idea creation and product typicality

In this section, we answer the questions whether there is an interaction effect of the source of the product's idea and product typicality on the mediating variables (as suggested in Figure 3) at all and whether the brand factor affects this interaction.

We used all data of our sample ( $N = 4.679$ ) and conducted a three-way ANOVA for each response variable with the brand (B), product typicality (T), and the source of the idea (SoI) as the factors. The results are shown in Table 2. In line with *Hypothesis 1*, a

$T \times SoI$  interaction between typicality and the source of the idea's creation is expected to exist. The results proved evidence for this interaction for all mediating variables. The findings also reveal a three-way  $B \times T \times SoI$  interaction for two mediating variables which indicates that the  $T \times SoI$  interaction varies across the brands. However, a detailed inspection of the data does not indicate a systematic bias due to including the brand factor. For instance, the strongest  $B \times T \times SoI$  interaction exists with regard to perceptions of company trustworthiness ( $F_{9, 4,647} = 4.821$ ; see last row of *Table 2*). Across the brands, the perceptions of trustworthiness are  $M_{SoI=company} = 4.23$  and  $M_{SoI=consumer} = 3.70$  for typical products (indicating lower perceptions of trustworthiness for denoting the idea for such products as consumer-created) and  $M_{SoI=company} = 4.07$  and  $M_{SoI=consumer} = 4.36$  for atypical products (indicating higher perception of trustworthiness for denoting the idea for such products as consumer-created). Additionally looking at the brand level shows the same type of the  $T \times SoI$  interaction although the size of this interaction effect differs across the brands.

In summary, this examination provides support for the presumption that there is an interaction effect of the source of the idea creation and product typicality which is not systematically affected by the brand factor.

Sources of variation	Test statistics	Response variables				
		Perceptions of innovative-ness	Perceptions of need ori-entation	Perceptions of product quality	Perceptions of company trust-worthiness	Purchase in-tention
Brand (B)	$F_{3, 4,647}$	9.690 <sup>a</sup>	63.439 <sup>a</sup>	48.691 <sup>a</sup>	83.896 <sup>a</sup>	184.044 <sup>a</sup>
Typicality (T)	$F_{1, 4,647}$	600.678 <sup>a</sup>	.199 <sup>NS</sup>	242.092 <sup>a</sup>	.692 <sup>NS</sup>	54.429 <sup>a</sup>
Source of idea (SoI)	$F_{3, 4,647}$	32.811 <sup>a</sup>	75.195 <sup>a</sup>	25.184 <sup>a</sup>	21.518 <sup>a</sup>	36.923 <sup>a</sup>
$B \times T$	$F_{3, 4,647}$	45.423 <sup>a</sup>	3.418 <sup>c</sup>	7.597 <sup>a</sup>	11.925 <sup>a</sup>	1.865 <sup>NS</sup>
$B \times SoI$	$F_{9, 4,647}$	3.958 <sup>a</sup>	1.833 <sup>NS</sup>	8.453 <sup>a</sup>	2.599 <sup>b</sup>	3.320 <sup>a</sup>
$T \times SoI$	$F_{3, 4,647}$	3.833 <sup>b</sup>	13.753 <sup>a</sup>	22.848 <sup>a</sup>	44.996 <sup>a</sup>	13.991 <sup>a</sup>
$B \times T \times SoI$	$F_{9, 4,647}$	.976 <sup>NS</sup>	2.066 <sup>c</sup>	1.865 <sup>NS</sup>	4.821 <sup>a</sup>	1.482 <sup>NS</sup>

Notes: a:  $p < .001$ , b:  $p < .01$ , c:  $p < .05$ , NS:  $p > .05$ .

The conditions under which  $H1$  predicts an interaction effect are marked in grey color.

*Table 2: Results of ANOVAs containing the brand, typicality, and source-of-idea factor*

### 3.5.3 Effect of consumer/creator similarity and interactions with brand and typicality

In this section, we analyze whether consumer/creator similarity affects perceptions of innovativeness, need-orientation, and product quality as proposed in *Figure 3* at all and whether this effect depends on the brand factor and the product-typicality factor.

We defined a similarity factor with two levels (consumer-generated idea vs. student-generated idea) and, thus, excluded the remaining data resulting in a reduced sample size ( $N = 2,174$ ). The results of three-way ANOVAs containing the brand (B), product typicality (T), and similarity (Sim) as factors are summarized in *Table 3*. In line with *Hypothesis 2*, an effect of similarity should exist. In these ANOVAs, this effect is a main effect because the source of idea creation is constant under this condition (i.e., consumers are always the source of the idea creation but there is variation due to the information about the similarity of the creator and the test person). The findings indicate that similarity affects perceptions of innovativeness, need-orientation, and product quality. The  $B \times Sim$ ,  $T \times Sim$  and  $B \times T \times Sim$  interactions reveal whether the effect of similarity depends on the brand and

product typicality. Among these interactions (see the last three rows of *Table 3* for the first three response variables), two significant effects can be found (B $\times$ Sim and T $\times$ Sim interaction effects on perceptions of product quality). For instance, the positive effect of similarity on perceptions of product quality is stronger for atypical products ( $M_{\text{consumer}} = 3.13$  vs.  $M_{\text{student}} = 3.71$ ,  $\Delta = .58$ ) compared to typical products ( $M_{\text{consumer}} = 4.31$  vs.  $M_{\text{student}} = 4.50$ ,  $\Delta = .19$ ). However, this finding has no consequences for the validity of *Hypothesis 2c*.

This analysis show that consumer/creator similarity is a factor that affects the mediating variables. For the perceptions of product quality, the strength of the effect of this factor depends on typicality and the brand; however, this finding is a “side effect” that does not influence the test of *Hypothesis 2*.

Sources of variation	Test statistics	Response variables				
		Perceptions of innovative-ness	Perceptions of need orientation	Perceptions of product quality	Perceptions of company trustworthiness	Purchase intention
Brand (B)	$F_{3, 2,158}$	3.11 <sup>b</sup>	27.716 <sup>a</sup>	16.930 <sup>a</sup>	48.113 <sup>a</sup>	82.993 <sup>a</sup>
Typicality (T)	$F_{1, 2,158}$	451.913 <sup>a</sup>	11.749 <sup>a</sup>	255.379 <sup>a</sup>	10.655 <sup>a</sup>	1.567 <sup>NS</sup>
Similarity (Sim)	$F_{1, 2,158}$	4.246 <sup>b</sup>	4.350 <sup>b</sup>	72.277 <sup>a</sup>	72.397 <sup>a</sup>	2.030 <sup>NS</sup>
B $\times$ T	$F_{3, 2,158}$	36.303 <sup>a</sup>	6.994 <sup>a</sup>	9.768 <sup>a</sup>	16.963 <sup>a</sup>	3.469 <sup>c</sup>
B $\times$ Sim	$F_{1, 2,158}$	1.738 <sup>NS</sup>	.464 <sup>NS</sup>	12.919 <sup>a</sup>	2.317 <sup>NS</sup>	.636 <sup>NS</sup>
T $\times$ Sim	$F_{1, 2,158}$	.404 <sup>NS</sup>	1.374 <sup>NS</sup>	23.308 <sup>a</sup>	73.080 <sup>a</sup>	.021 <sup>NS</sup>
B $\times$ T $\times$ Sim	$F_{3, 2,158}$	.559 <sup>NS</sup>	.739 <sup>NS</sup>	2.395 <sup>NS</sup>	.809 <sup>NS</sup>	.307 <sup>NS</sup>

Notes: a:  $p < .001$ , b:  $p < .01$ , c:  $p < .05$ , NS:  $p > .05$ .

The data for the “company is source-of-creation” and “no information about the source-of-creation” conditions are excluded. The conditions under which *H2* predicts an effect are marked in grey color.

*Table 3: Results of ANOVAs containing the brand, typicality, and similarity factor*

### 3.5.4 Familiarity with user innovation as a control variable

In this step, we examine whether we should or should not include the test person's familiarity with user innovation as a further moderating variable in our model because *Schreier et al.* (2012) reported that the effect of created-by-consumer cues is contingent on familiarity with user innovations and, thus, the results for the product typicality and similarity could depend on this variable.

We adopted the scales used by these authors. We divided our sample into two sub-samples regarding one's familiarity with user innovation and did not find results indicating that this variable systematically affected our findings. For instance, we combined the eight test conditions (4 levels of source of creation  $\times$  2 levels of product typicality) of our design with familiarity with user innovation (two conditions) and assessed the interaction effect on purchase intention with the help of a two-way ANOVA. We did not find a significant interaction ( $F_{7, 4,663} = 1.230$ ,  $p > .20$ ).

Probably, the familiarity factor was less important in our study compared to the study of *Schreier et al.* (2012) because the instrument of consumer-generated ideas has become better known among consumers within the past years. We decided not to include this factor as an additional moderator in our model.

### 3.5.5 Effects of the source of the idea on purchase intentions depending on typicality

The hypotheses postulate divergent effects of the communicated source of the idea's creation on the mediating variables (i.e., the perceptual variables). However, these effects are only important for practice, if these factors (source and typicality) are also effective for influencing the purchase intent in a systematic way. Thus, the next analyses aimed to show whether there is an overall effect of these factors on purchase intentions at all.

We used the purchase intentions as the dependent variable and investigated the effects of the source of the product's idea and product typicality on this variable. We divided our sample into two subsamples according to product typicality and assessed the effect of the source of the product idea's creation. The findings of these ANOVAs are shown in *Figure 5*. We found a marginally positive effect of denoting the consumer (compared with the company) as the source of the idea's creation for typical products ( $M_{\text{company}} = 3.83$ ,  $M_{\text{consumer}} = 4.09$ ,  $t_{1,001} = 1.833$ ,  $p < .05$ ) and a strong positive effect for atypical products ( $M_{\text{company}} = 3.06$ ,  $M_{\text{consumer}} = 4.01$ ,  $t_{961} = 6.642$ ,  $p < .001$ ). These findings are widely stable across the brands. However, our data did not indicate that the effect of using a created-by-consumer cue is enhanced by combining this cue with information about similarities between the targeted consumer and the consumer who created the idea. Note, that this finding does not contradict the findings reported in the previous section. In the previous section, we had shown that similarity affects perception of innovativeness, need-orientation, and product quality. However, the sign of these effects are obviously different resulting in an overall null effect of similarity with regard to purchase intentions.

In sum, our data provide evidence of the presumption that the efficacy of using a created-by-consumer cue is contingent on the product's low typicality for its category.

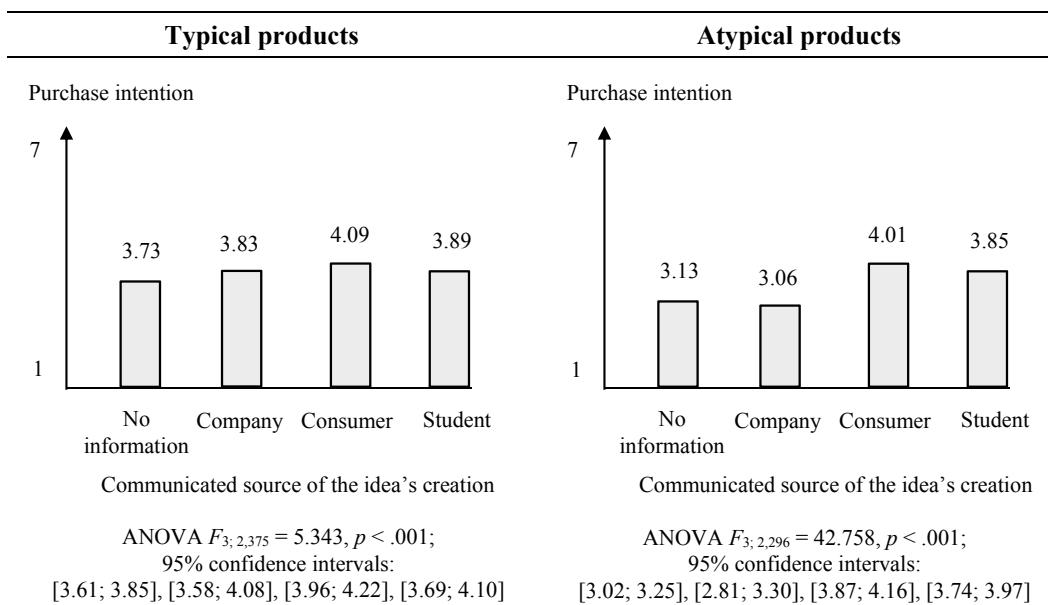


Figure 5: Effect of the source of the idea on purchase intention depending on typicality

### 3.5.6 Relevancy of the mediating variables

The next step aimed to analyze the relevancy of the mediating variables contained in *Figure 3*. Note, that we simply had adopted the position of other authors and presumed that perceptions of innovativeness, need-orientation, and product quality can explain the effect of the source of the idea's creation on purchase intentions. Moreover, we had added an additional mediating variable (perceptions of the company's trustworthiness). Here, we proved these basis relationships prior to testing our hypotheses because the hypotheses are built on them.

We selected the data for two conditions of the source-of-creation factor (0 = company, 1 = consumer) and used the resulting binary variable as the independent variable for a multiple-mediation model that included perceptions of innovativeness, need orientation, product quality, and trustworthiness as mediators and purchase intention as the dependent variable. We estimated the coefficients separately for typical and atypical products by using the procedure suggested by *Preacher/Hayes* (2008). These authors recommend users of the multi-mediation models to pay attention to the fact that the mediating variables are correlated. A major source for correlations is the use of the same independent variable that affects all mediators. They suggest “to select mediators that represent unique constructs with as little conceptual overlap as possible” (p. 887). Thereby, these authors request users of multi-mediation models to use mediators that are distinct concepts from the theoretical point of view. At least for the perceptions of innovativeness, need-orientation, and executional quality, prior research assumes that these concepts are conceptually different (e.g., *Kristensson et al.* 2004). From the statistical point of view, the statistics of factor analyses show that the items have high loadings on the common factors they are assigned to. The results of the estimation of the multiple-mediation model are shown in the upper part of *Figure 6*. The effects of the binary variable on the mediating variables reflect the difference between the respective mean values that are contained in *Table 1*. The estimates from the multiple-mediation model showed that denoting the consumer as the source of idea creation elicited higher perceptions of product innovativeness and need orientation. For atypical products, this piece of information impaired perceptions of product quality. For typical products, lower perceptions of trustworthiness resulted from referring to consumers as the source of creation. These findings are as expected and, thus, can serve as the foundation to test our hypotheses. The sign of the effects of perceptions of innovativeness on purchase intention was positive for typical and negative for atypical products; this finding indicates an inverted u-shaped relationship between innovativeness and purchase intention (for a discussion of the optimum level of innovation, see *Ram/Sheth* 1989; *Gatignon/Xuereb* 1997).

In summary, these investigations show that the perceptions of innovativeness, need-orientation, product quality, and company trustworthiness mediate the relationship between the communicated source of the product's idea and purchase intentions.

### 3.5.7 Effect of explicitly denoting the company as the source of creation

In previous research, the authors tested the effect of using a created-by-consumer cue by comparing this information with a case where the company was *explicitly* denoted as the source of the product idea's creation (*Fuchs/Schreier* 2011; *Schreier et al.* 2012; *Fuchs et al.* 2013). However, in practice, companies would not explicitly refer to their employees in

the case of company-generated product ideas. Instead, they would refrain from providing any information about the source of idea creation. Thus, we compare the effect of providing explicit information that the company had invented the idea for the product to the effect resulting in an information-absent condition.

We repeated the multiple-mediation analyses we described in the previous section but used a different independent binary variable for the source of creation (0 = no information, 1 = consumer). By doing so, we can compare the findings for explicitly denoting the company as the source of the idea's creation (0 = company, 1 = consumer; see upper part of *Figure 6*) to the results when we compare the no-information condition to the consumer-as-source-of-creation condition (0 = no information, 1 = consumer; see middle part of *Figure 6*). The findings do not systematically depend on whether we use “0 = company, 1 = consumer” or “0 = no information, 1 = consumer” as the levels of the independent variable.

We conclude that the findings are not systematically affected by either explicitly denoting or implicitly referring to the company as the source of the idea creation.

### 3.6 Test of Hypothesis 1

In *Table 4*, we report the coefficients for the effect of the created-by-consumer cue on the mediating variables as they were estimated by the multiple-mediation models either for the typical or for the atypical products (see the upper part of *Figure 6*). The subsequent use of a moderated-mediation model (Hayes 2013, model 7) allows for testing whether these coefficients depend on the level of product typicality. The difference between the coefficients and the respective test statistics are reported in the last column of *Table 4*.

In *H1a* and *H1b*, we expected a more positive effect of using a created-by-consumer cue on perceptions of innovativeness and need orientation for atypical compared with typical products. The results are in line with this presumption. In *H1c*, we presumed a more negative effect on perceptions of product quality. The results indicate a null effect for typical products and a negative effect for atypical products; the latter finding conforms to this presumption. In *H1d*, we postulated a negative effect of the cue on company trustworthiness for typical products and a lower or even absent effect for atypical products. The first part of this presumption is confirmed by our data, whereas the second part is not supported. Perceptions of trustworthiness were even higher when an atypical product was denoted as consumer-created (compared with company-created).

Mediating variable	Effect of using a created-by-consumer (vs. created-by- company) cue on the mediating variable		Moderating effect of product typicality
	Typical products	Atypical products	
Perceptions of innovativeness ( <i>H<sub>1a</sub></i> )	.319	.539	$\Delta = .220, t = 1.695, p < .05$
Perceptions of need orientation ( <i>H<sub>1b</sub></i> )	.303	.755	$\Delta = .452, t = 3.220, p < .001$
Perceptions of product quality ( <i>H<sub>1c</sub></i> )	.019	-.629	$\Delta = -.648, t = -5.087, p < .001$
Perceptions of trustworthiness ( <i>H<sub>1d</sub></i> )	-.529	.292	$\Delta = .821, t = 6.539, p < .001$

*Table 4: Results of the moderated-mediation model*

### 3.7 Test of Hypothesis 2

In *H2*, we hypothesized that a created-by-consumer cue has a more positive effect on perceptions of innovativeness and need orientation and a less negative effect on perceptions of product quality when it is accompanied by a cue that indicates a similarity between the targeted consumer and the consumer who created the idea for the product. To test these presumptions, we conducted an additional multiple-mediation analysis by using a different binary variable as the independent variable (0 = consumer, 1 = student). The findings are shown in the lower part of *Figure 6*.

In *H2a*, we expected a more positive effect of a created-by-consumer cue on perceptions of innovativeness when the cue is accompanied by similarity information; this presumption is supported for atypical products. In *H2b*, we expected the same pattern of findings regarding need orientation; the results do not confirm our expectations. In *H2c*, we expected a positive effect of the similarity cue on perceptions of product quality, which is supported.

However, in summary, we cannot provide evidence regarding the presumption that using a similarity cue increases the effect of created-by-consumer information on purchase intention, although *H2a* was partly and *H2c* was fully supported.

## 4. Implications

Our study considered aspects in the field of research on created-by-consumer cues that have not yet been considered. We derived these aspects from observations about how marketing practices use these types of cues.

First, we found that the effectiveness of these cues in affecting purchase intention is contingent on product typicality.

For typical products, using a created-by-consumer cue increased perceptions of innovativeness and need orientation, but these positive effects were widely counterbalanced by a co-occurring negative effect through lower perceptions of company trustworthiness, thus resulting in a marginally positive total effect. The latter problem did not arise from skepticism about whether the consumer who was denoted as the creator actually existed but from the fact that the company decided to use a trivial, consumer-generated idea even though consumers can easily imagine numerous, more sophisticated user-generated ideas. *Figure 2* showed an example where a trivial idea was realized. Consumers could question why the company did not implement another idea, such as refining potato salad with special ingredients such as capers, roasted pine nuts, dried tomato, wild garlic, or pumpkin. Consumers who pay attention to idea contests were likely disappointed when the company decided to produce a bar of chocolate “with cream and cookies” or to produce cookies “with cherry, nuts, and chocolate.” Because there may be different advertising cues that are effective for the promotion of typical products, we recommend not using created-by-consumer cues for such products.

For atypical products, the effects of created-by-consumer cues on perceptions of innovativeness and need orientation were stronger. Moreover, there was no problem with beliefs about manipulative intent (i.e., company trustworthiness). However, in this case, the use of these cues impaired perceptions of product quality. Chocolate with jelly and cacao lenses or platform shoes that look like high heels (see *Figure 4*) may be considered gimmicks. Although we found an overall positive effect of these cues on purchase intention, this ef-

fect could be further strengthened when skepticism about product quality can be reduced. Thus, we recommend that marketers use created-by-consumer cues to promote atypical products, but they should ensure that the selected ideas do not cause consumers to think deeply about problems regarding the resulting product quality. Probably, accompanying measures such as money-back warranties, recommendations of celebrities and experts, or messages about the percentage of customers who are satisfied with the product could reduce skepticism about the quality of atypical products that are consumer-created.

Second, we found that accompanying created-by-consumer cues with signals of similarity is ineffective for affecting purchase intention.

For typical products, we found that the presence of similarity cues counterbalanced the negative effect via perceptions of trustworthiness. However, there was a strong negative residual direct effect that we could not explain using the included mediating variables ( $\beta = -.498$  for typical products; see *Figure 6*). Most likely, students in the role of consumers may develop thoughts such as the following: “The product looks typical. Thus, the person who created the product’s idea is not similar to me even though s/he is a student like me.” In this sense, product typicality may affect the sensations of similarity to the idea’s creators.

For atypical products, similarity cues counterbalanced the negative effect via perceptions of product quality on purchase intention. However, we also found a negative residual direct effect in this case. Most likely, consumers doubt that similar others are actually able to create ideas for atypical products.

In summary, our study suggests that created-by-consumer cues are effective in impacting purchase intention for atypical products. In this condition, these cues can provide an explanation why the company offers this type of product.

### 5. Limitations and suggestions for future research

**Limitations:** We used a student sample, we considered a small set of products, and we tested the effect of a very simple similarity cue. We likely overestimated the effect of the created-by-consumer cues because students may be more prone to considering atypical products; different parts of the population may reject atypical products independently of whether they are presented to consumers as the creation of other consumers. *Figure 1* illustrated similarity cues that were used by McDonald’s in which the company presented a sample of consumers who created different versions of new hamburgers. We did not consider this type of cue.

**Suggestions for future research:** We found that the similarity cue did not affect the effectiveness of created-by-consumer cues in total. Thus, future research could look for alternative cues that accompany created-by-consumer cues. For instance, some companies offer online tools that enable consumers to develop products that are composed of pre-determined parts (e.g., ingredients for myMuesli cereals or components for “Mi Adidas” shoes) by means of mass customization. Companies could offer product versions that are often “created” (e.g., certain mixes of ingredients) as created-by-consumer products and promote these items with “created-by-consumer” messages that are accompanied by a “one of the most often created versions” statement. Looking at this aspect could be promising for theory and practice. Moreover, future research could investigate effects resulting from combining atypical created-by-consumer products with atypical packaging, colors, names of the product, and images used in the advertisements. Especially the motifs used in the

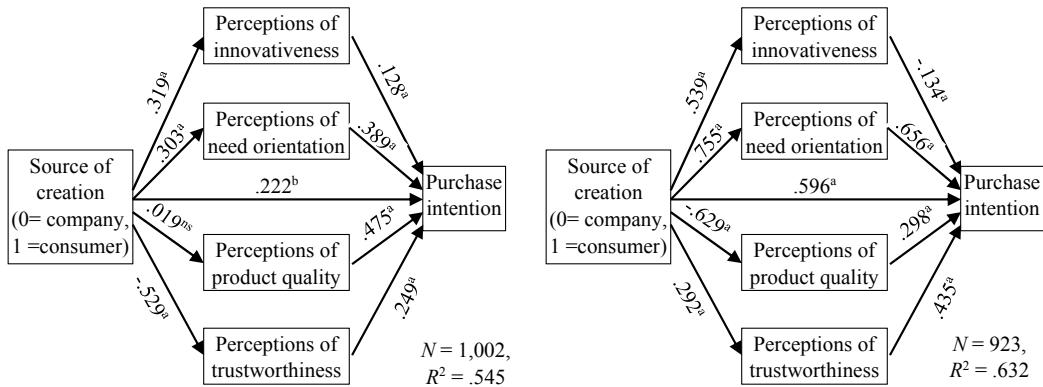
ads could also be denoted as consumer-generated (as an example for a campaign based on consumer-generated motifs see the [apple.com/de/iphone/world-gallery/](http://apple.com/de/iphone/world-gallery/)). By doing so, the congruence between the cues increases and effects such as a higher believability of the created-by-consumer information and a more intense feeling right might be triggered. Future research should also investigate responses of consumers when competing companies (e.g., McDonald's and Burger King) use the same strategy for promoting products with the help of created-by-consumer cues.

Finally, we would like to note that academic research is prone to identifying conditions under which created-by-consumer cues are ineffective (high-complexity products, high-status-relevancy products, and typical products). Even under these restrictions, numerous opportunities remain to benefit from using created-by-consumer cues. Thus, marketers should recognize the instrument of consumer-idea creation as a challenge to motivate consumers to provide valuable ideas for real innovations and as a tool for promoting the resulting products.

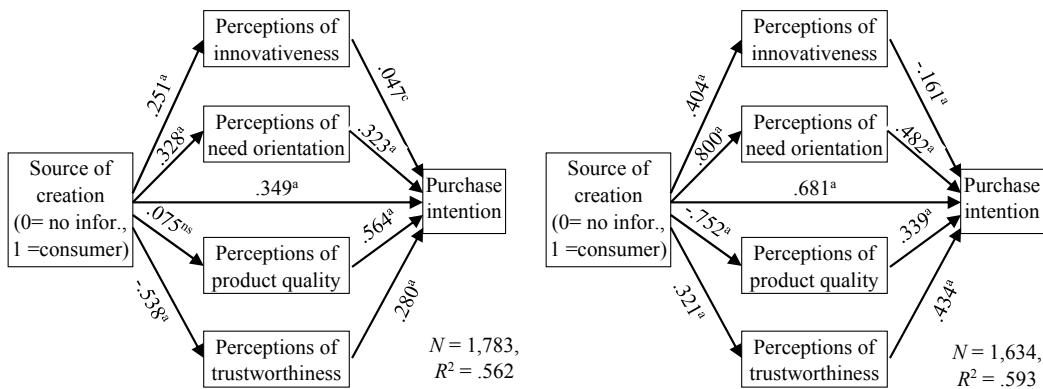
## Typical products

## Atypical products

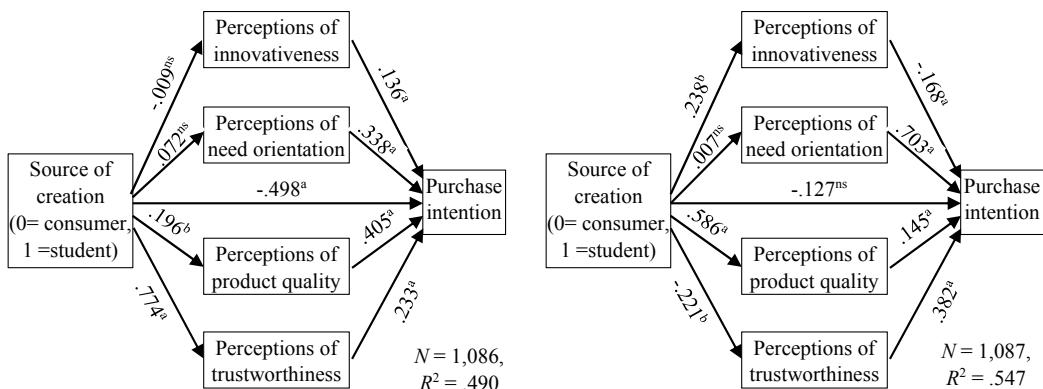
Test of H1: Company vs. consumer-created idea



Consumer-created idea vs. information absent condition



Test of H2: Consumer-created vs. student-created idea



Note: a:  $p < .001$ , b:  $p < .01$ , c:  $p < .05$ .

Figure 6: Results of estimating multiple mediation models

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