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The Influence of Brand-Product Congruence on Consumer Evaluations:

The Role of Processing Fluency and Product Type

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Abstract

Prior research has suggested that congruence among different factors involved in the process of personality perception leads to more positive evaluations of the product or brand. In line with recent approaches on processing fluency, the current study reasons that congruence facilitates processing fluency, which in turn enhances consumer ratings. Further, it has been proposed that the influence of processing fluency would differ in its effect according to the product type. The current results of the experimental study have revealed that reliability ratings are positively influenced by congruence between the product and the brand, which is mediated by processing fluency. Additionally, product type has been found to moderate the influence of processing fluency on brand reliability. Contrary to expectations product type had only a direct effect on product reliability. The results of this study and future approaches are discussed in the final section. The Influence of Brand-Product Congruence on Consumer Evaluations:

The Role of Processing Fluency and Product Type

"Friendly", "exciting", or "tough" are words that are often used to describe a product. These words usually are subject to human personality, but are nevertheless employed to put visual and functional aspects of objects into words. Differentiating objects in terms of personality has provided new possibilities in the area of marketing, since consumers have found it more and more difficult to judge products based on real differences in technical functions, costs or quality, because of advancing technologies (Dumaine, 1991; Veryzer, 1995). In response to this, more attention has been paid to non-physical factors, such as product personality, to enhance the experience of the product. In the field of consumer behaviour research, it has been established that inanimate objects such as products (Janlert & Stolterman, 1997; Jordan, 2000; Levy, 1959; Sirgy, 1982) or brands (Aaker, 1997; Biel, 1993) can be associated with human characteristics as well. For instance, rounded forms are perceived as more harmonious than angular forms, which are experienced to promote more conflict (Zhang, Feick, & Price, 2006). The perceived impression has been found to have an influence on evaluations of the brand and product, such as product preference, brand loyalty, price estimation, and likelihood of purchase (Aaker, 1999; Govers & Schoormans, 2005; Kressmann, Sirgy, Herrmann, Huber, Huber, & Lee, 2006; Suk, Irtel, Park, & Sohn, 2007). However, rather than single aspects of the product or brand the holistic impression is assumed to account for the consumer evaluation (Orth & Malkewitz, 2008). In this regard, recent studies have focused on the investigation of the importance of congruence among physical aspects as well as symbolic meanings. It has been established that congruence among visual features enhances product or brand evaluations (Van Rompay & Pruyn, in press; Van Rompay, De Vries, & Van Venrooij, in press). More extensive research has explored the effects of congruence of the brand personality, product personality or store personality with the consumer personality (e.g., Aaker, 1997; Govers & Schoormans, 2005; Grohmann, 2009; Sirgy, Grewal, & Mangleburg,

2000). The results indicate that congruence between one of these factors and the consumer personality enhances consumer judgements. Nevertheless, congruence among other elements of the marketing mix, such as the product, the brand, the store location, or advertisement, has rarely been addressed.

The current research aims to analyse the influence of brand-product congruence on consumer responses. More specifically, congruence of the brand and the product facilitates processing, and in turn, high processing fluency is proposed to enhance consumer evaluations. This influence on consumer judgements, however, depends on the importance of high processing fluency according to the product type. It is assumed that high processing fluency is more important and low processing fluency is more harmful to utilitarian products, which are purchased to solve problems, than hedonic products, that are purchased for experiential reasons. In order to examine these propositions, an experimental study was conducted in which different brand aspects and product appearances of beverages were manipulated.

Effects of congruence on brand and product evaluations

Besides being influenced by the appearance of the product or elements contributing to the formation of a personality impression, evaluative criteria have been found to be influenced by the congruence of symbolic meanings as well as the physical aspects of the product. In respect of this, researchers have engaged in the exploration of the influence of congruence on constructs such as brand credibility, trustworthiness, liking, or purchase intention (Grohmann, 2009; Van Rompay & Pruyn, in press; Van Rompay et al., in press; Wang, Yang, & Liu, 2009).

Examining the effect of congruence of symbolic impressions, Grohmann (2009) assessed the effect of the personality of the brand matching the personality of the consumer. The results indicated that congruence among brand personality and the consumer personality enhanced the rating of trustworthiness of the brand. Concerning the subject of physical aspects, it has been found that the congruence of shape and typeface of a bottle increases the perception of brand credibility and product value (Van Rompay & Pruyn, in press). Likewise, a picture congruent to the description of a hotel had a positive influence on the appraisal of the hotel in a study by Van Rompay et al. (in press). These studies provide examples of positive effects of congruence on evaluative criteria, which may account for the consumer's decision to purchase a product or to refrain from obtaining it.

Compared to the existing research on physical product aspects studies investigating congruence effects of symbolic impressions, other than congruence with the consumer personality, are extremely rare. In this regard, Wang et al. (2009) conducted a study exploring the congruence among the consumer personality, the brand personality and the company personality. First of all, they found effects of congruence among the consumer and the company personality as well as of congruence among the consumer and brand personality on purchase intention. More importantly, their results demonstrate a significant influence of congruence among brand personality and company personality on purchase intention. This implies that congruence among various factors of the marketing mix influences the consumer's response to the product or brand.

Focussing on the congruence among the product and the brand, the current study asserts that a brand promoting the same impression as the product itself will enhance the evaluation by the consumer. In contrast, if brand and product incorporate different impressions, it is assumed that judgements will be less positive. As a conclusion the following hypothesis is stated:

H₁: The congruence of brand and product impressions influences the evaluation by the consumer; specifically congruence between brand and product impressions will enhance evaluations, while incongruence between brand and product impressions will decrease evaluations.

Processing fluency

In order to find a reasonable explanation for the effects of congruence on consumer responses, recent research has focused on the amount of effort put into the processing of the presented stimuli. Manipulating the contrast between figure and ground for several stimuli, Reber, Winkielman, and Schwarz (1998) demonstrated that the less ambiguous the stimuli were, the less effort was needed and the easier they were processed. The experienced ease of processing is defined as processing fluency (e.g., Labroo & Lee, 2006; Lee & Aaker, 2004) and is found to be intrinsically pleasant (Reber et al., 1998; Reber, Schwarz, & Winkielman, 2004). Thus, people enjoy the experience of high processing fluency. This feeling of liking is further misattributed to the presented stimulus causing enhanced ratings of stimuli which can easily be processed.

In order to validate this notion, Winkielman and Fazendeiro (2003) told participants that either background music or the ease with which stimuli came to mind could influence their judgement of a stimulus. They detected that participants who believed their judgement was influenced by the music did not give more positive ratings when experiencing high processing fluency. Providing an alternative explanation for the positive experience of high processing fluency, thus, prevented people from misattributing the pleasant feeling to the stimulus at hand. These results confirm that the positive affect, elicited by high processing, is misattributed to the liking of an object.

Effects of processing fluency on consumer evaluations. Applying the standards of processing fluency to the domain of congruence, it would be expected that stimuli that are congruent are easier to process. It seems that congruent messages are less ambiguous and contain less information to be processed and therefore, identification is facilitated and processing is made easier (Hekkert, 2006). Indeed, research has shown that congruent stimuli promote processing fluency (Labroo & Lee, 2006; Lee & Aaker, 2004; Van Rompay et al., in press). The study of Lee and Aaker (2004) indicated that negative or positive outcome

promotions, which are congruent with the framing of the message, are processed more fluently than incongruent framings. More specifically to consumer research, Labroo and Lee (2006) detected a positive effect of priming a goal congruent to the advertised outcome of a brand on liking and purchase intention. Moreover, products that communicate a matching message are preferred over those that do not (Hekkert, 2006). In their studies, Reber et al. (1998) as well as Labroo and Lee (2006) and Lee and Aaker (2004) not only found that processing fluency was enhanced when presented stimuli were congruent, but also that the congruent stimulus was preferred to incongruent stimuli. Van Rompay et al. (in press) established in their study that picture-text congruence enhances ratings of liking and fluency of processing. Based on these studies it can be stated that evaluations, such as liking and purchase intention, are enhanced by high processing fluency.

Additionally, a limited number of studies indicated that processing fluency also has an effect on other evaluative criteria. In their experiment Reber and Schwarz (1999) asked participants to judge whether a number of statements presented to them were true or false. By using different colour combinations of the background and the text, the statements' processing fluency was manipulated. The results showed that participants rated statements that were easy to process more often true than false. Statements difficult to process, on the other hand, were more often judged to be false. Similar results have been presented by Unkelbach (2007).

Based on these studies it is understood that high processing fluency enhances perceived ratings of criteria, such as liking or truthfulness and that the evidence of enhancing effects of congruence can be ascribed to processing fluency. Adapting the processing fluency approach to the current study, it is expected that a match of brand and product enhances the ease of processing. Processing fluency will further influence evaluations made by the consumer to be more positive. Incongruence among the brand and the product should decrease the processing fluency and in turn is estimated to have a negative impact on consumer judgements.

Processing fluency is, therefore, expected to mediate the influence of congruence among the brand and the product on the evaluation criteria and the following hypothesis is proposed:

H₂: The influence of brand-product congruence is mediated by processing fluency;
 specifically congruence of brand and product impressions enhances processing fluency and thus, will positively influence consumer evaluations. Incongruence of brand and product impressions will decrease processing fluency and thus, will negatively influence consumer evaluations.

Type of product

Processing fluency has been shown to have an influence on evaluative criteria, such as purchase intention and brand credibility for numerous products (Labroo & Lee, 2006; Van Rompay et al., in press; Reber & Schwarz, 1999; Unkelbach, 2007). However, products can not all be treated alike, because they differ from each other by various factors. One way of distinguishing products from each other is based on the purpose they are supposed to fulfil. Some products are primarily purchased for functional reasons, like washing machines or air conditionings, while other products are consumed for their enjoyment, such as jeans and fragrances (Aaker, 1999). Consumed to solve a problem, utilitarian products serve mainly functional and instrumental purposes. Products with experiential value, called hedonic products, address affective attachment such as fun and pleasure (Dhar & Wertenbroch, 2000; Holbrook & Hirschman, 1982).

According to the primary purpose the product is expected to meet, high processing fluency is believed to be of differing importance. Based on studies outlined above, high processing fluency, elicited by congruence, is assumed to have a positive effect on product evaluation, in terms of facilitating characterization. A quick and easy classification is estimated to be especially important to utilitarian products, as they are expected to solve problems and an effortless finding of a solution is appreciated. Additionally, high processing fluency has been associated with familiarity and safety, which is perceived as a preference for the brand or product (Winkielman, Schwarz, Fazendeiro, & Reber, 2003). It is assumed to be more relevant for utilitarian products because it familiarity also facilitates the assessment of the product's benefits.

On the other hand, concerning hedonic products inhibited classification can be regarded as a puzzle the consumer seeks to solve for entertainment. The gratification relies in the challenge of solving the puzzle and not in finding the next best solution. Accordingly, enhanced identification might not be desired, because difficult rather than easy recognition encourages reflection. Indeed, a higher level of insight has been found to be experienced positively in regard to providing more stimulation (Ludden, Schifferstein, & Hekkert, 2004; Pocheptsova, Labroo, & Dhar, 2009; Silvia, 2005). Moreover, familiarity might be interpreted negatively, because it appears to be less special and is regarded as boring and dull (Pocheptsova et al., 2009). This would apply especially to hedonic products, because they are valued for their entertaining experience. Hence it can be assumed that high processing fluency rather than low processing fluency benefits hedonic products. Further, the enhancing effect of high processing fluency and decreasing effect of low processing fluency on consumer evaluations is expected to be more prominent for utilitarian products than for hedonic products. Consequently, the following hypothesis is formulated:

H₃: Mediation of congruence on consumer evaluation is conditional. Product type moderates the effect of processing fluency on consumer evaluations; specifically, high processing fluency will enhance and low processing fluency will impair evaluations for utilitarian products more than for hedonic products.

Deduced from the three hypotheses that have been formulated the following model is suggested:



Figure 1: Conceptual model of congruence.

Method

Pilot study

Prior to the experiment a pilot study was conducted in order to validate the stimulus material. Two different brand descriptions were created, which consisted of a logo, three catchphrases and a picture. Furthermore, two different bottles were created, which differed in their form and content colour. The development of the stimulus material, which was identical for the pilot study and the main study, was based on earlier studies (e.g. Zhang et al., 2006). Images of the created brands and products can be seen in Appendix A and Appendix B.

The results of the pilot study indicated that from their impression the two brands were perceived as significantly different whereas the first brand was perceived as more harmonious (M = 5.14, SD = 0.20 versus M = 3.67, SD = 0.22, F(1, 13) = 54.56, p < .01; n = 14) and the second brand was perceived as more confrontational (M = 2.38, SD = 0.16 versus M = 4.48, SD = 0.30, F(1, 13) = 57.59, p < .01, n = 14), as intended. Also the two products were perceived to be either more harmonious (M = 4.59, SD = 0.14 versus M = 2.39, SD = 0.16, F(1, 50) = 98.52, p < .01, n = 51) or confrontational (M = 2.99, SD = 0.14 versus M = 4.89, SD = 0.18, F(1, 51) = 61.52, p < .01, n = 52) respectively, which yielded a significant difference.

Additionally, congruence of the brand and the product were perceived to be high when brand and product were shaped to incorporate the same facet and was perceived to be low when brand and product promoted different aspects (F(1, 13) = 8.78, p = .01). Thus, the pilot study confirmed the intended impressions of the brand and the product and the created stimulus materials were selected to be used in the experiment.

Finally, the pilot study confirmed a significant difference on utilitarian and hedonic values between the two products, mineral water and soda, chosen to represent the product type (M =6.24, SD = 0.08 versus M = 3.68, SD = 0.15, F(1, 49) = 181.91, p < .01, n = 50 and M = 4.90, SD = 0.12 versus M = 5.42, SD = 0.11, F(1, 49) = 9.51, p < .01, n = 50, respectively).

Design and Participants

One hundred and sixty-one participants at the University of Twente (50 male and 111 female) took part in this study. The participants were between 18 and 35 years old with an average age of 22.52 (SD = 2.79). The experiment had a 2 (brand impression: harmonious versus confrontational) * 2 (product impression: harmonious versus confrontational) * 2 (product type: hedonic versus utilitarian) between-subjects design.

Procedure

The experiment was conducted via an online questionnaire and instructions were provided on screen. After answering some demographical questions, an advertisement, consisting of a description of a brand and an accompanying product that supposedly was soon to be launched in the market, was presented to each participant. The brand was depicted to be either harmonious or confrontational and the product either did or did not match the described brand (see Appendix C). Participants were asked to examine the advertisement and consequently to rate several evaluation criteria. Next, participants were questioned about how congruent they perceived the product and the brand to be and how easy it was for them to make their judgements to assess processing fluency. Finally, a questionnaire about the product type had to be completed. After finishing the experiment, the participants were thanked and an

incentive was offered by being given the opportunity of taking part in a lottery to win an iPod or a gift certificate.

Manipulation measures

First, the impressions of the brand and the product were measured by the same scale to control for correct manipulations. Four items of the constructed scale concerned harmony (brand and product: Cronbach's Alpha = .90) and four additional items constituted the construct of confrontation (brand: Cronbach's Alpha = .83, product: Cronbach's Alpha = .87). Next, four items (Cronbach's Alpha = .90) concerning the perceived congruence of the product and the brand were assessed. Finally, six items promoting utilitarian values (Cronbach's Alpha = .86) and six items associated with hedonic values (Cronbach's Alpha = .86) had to be rated to evaluate the presented product in terms of its product type.

Dependent variables

A scale of eighteen items was used to estimate the evaluations made by the respondents. Six of the items were concerned with the reliability of the brand (Cronbach's Alpha = .88), while three additional items, similar to those items assessing brand reliability, measured product reliability (Cronbach's Alpha = .82). Another six items constituted the measurement for product appeal (Cronbach's Alpha = .83). Subsequently, three items questioned the participants about their presumed purchase intentions (Cronbach's Alpha = .94). All items of the dependent variables are displayed in Appendix D.

Processing fluency measure

After evaluating the brand and the product, two scales were used to assess processing fluency. The first scale included two questions (Cronbach's Alpha = .78) asking the participant how difficult it was to process the information and how difficult it was to understand the

information (see Lee & Aaker, 2004). Furthermore, a scale adopted from Ellen and Bone (1991), consisting of ten items (Cronbach's Alpha = .82), assessing the vividness of the imagery evoked by the advertisement, was used as a second measure of processing fluency. The items of all scales included were rated on seven-point Likert scales, ranging from "strongly agree" to "strongly disagree".

Results

Manipulation checks

Brand and product impressions. The brand and the product in the advertisements were manipulated to promote different impressions. Brand impression was expected to differ significantly on harmony and confrontation for the two brands. Performing a MANOVA with the brand as independent variable and harmony and confrontation as dependent variables, a significant difference between the facets (F(1, 159) = 25.73, p < .01 and F(1, 159) = 41.46, p< .01, respectively) was found for the two brands. The harmonious brand scored higher on harmony (M = 4.57, SD = 0.13 versus M = 3.60, SD = 0.14) and lower on confrontation (M =2.75, SD = 0.14 versus M = 3.98, SD = 0.14) than the confrontational brand. Similarly, the product was manipulated to be either rounded or angular in form, which was expected to correlate to a more harmonious or confrontational impression, respectively. An additional MANOVA with the product as independent variable and harmony and confrontation as dependent variables, confirmed a significant difference of the products on harmony (M =3.98, SD = 0.14 versus M = 3.60, SD = 0.14, F(1, 159) = 10.50, p < .01) and a marginally significant difference on confrontation (M = 2.72, SD = 0.14 versus M = 3.98, SD = 0.14. F (1, 159) = 3.20, p = .08). Concluding from this analysis it can be stated that participants perceived the brand and product impressions as intended by the manipulation. Means and standard deviations of the manipulation check of product and brand impression can be seen in Table 1.

		Н	Harmonious			Confrontational			
		M	SD	N	М	SD	N		
Brand	Harmonious	4.57	0.13	81	2.75	0.14	81		
	Confrontational	3.60	0.14	80	3.98	0.14	80		
Product	Harmonious	3.98	0.14	81	2.72	0.15	81		
	Confrontational	3.33	0.14	80	3.09	0.14	80		

Table 1.Means and standard deviations of brand and product impressions.

Note. Values are the mean of reported scores on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*).

Congruence. Another measure was taken to assure that congruence and incongruence of the brand and product impressions could be identified by the participants. Congruence of product and brand facets was assumed to occur when both promoted harmony or when both expressed confrontation. A combination of harmony and confrontation was expected to be perceived as incongruent. By conducting an ANOVA with the congruence measure as dependent variable, participants were shown to rate congruent combinations of brand and product facets to be significantly more congruent (M = 3.72, SD = 0.15) than incongruent combinations (M = 3.08, SD = 0.14, F(1,159) = 9.93, p < .01). Congruence was, thus, perceived according to expectations.

Product Type. In order to measure the effect of product type, soda was chosen to represent the hedonic product and mineral water the utilitarian product. In line with the product type, soda was assumed to score high on hedonic values, while mineral water would be rated higher on utilitarian values. Indeed, the hedonic product was perceived to promote (marginally) more hedonic values than the utilitarian product (M = 3.59, SD = 0.12 versus M = 3.27, SD = 0.12, F(1, 159) = 3.57, p = .06) and the utilitarian product was correctly identified to possess more utilitarian values than the hedonic product (M = 3.71, SD = 0.13 versus M = 4.17, SD = 0.13, F(1, 159) = 6.40, p = .01). Thus, the predicted difference between the products was confirmed.

The effect of congruence on consumer evaluations

The hypothesis proposed that the congruence of the brand and the product would have an influence on the consumer evaluations. Congruence among the brand and the product was expected to enhance evaluation measures and incongruence was assumed to decrease evaluation. In order to conduct the analysis, a new variable had to be computed for the measure of congruence. A brand impression matching the product was labelled congruent and a brand impression not matching the product was specified as incongruent. The dichotomous values of the new congruence variable and the product type variable were contrast coded (1

and -1).

Table 2.

A between-subject MANOVA was performed with congruence and product type as independent variables and brand reliability, product reliability, appeal, and purchase intention as dependent variables. As can be seen in Table 2, a significant main effect of the congruence

Source	df	F	р
A. Analysis of Variance for Brand Reliability			
Congruence	1	5.23	.02
Product Type	1	0.12	.73
Congruence x Product Type	1	0.01	.92
Error	157		
B. Analysis of Variance for Product Reliability			
Congruence	1	3.03	.08
Product Type	1	6.23	.01
Congruence x Product Type	1	0.08	.78
Error	157		
C. Analysis of Variance for Product Appeal			
Congruence	1	0.72	.40
Product Type	1	0.04	.84
Congruence x Product Type	1	0.60	.44
Error	157		
D. Analysis of Variance for Purchase Intention			
Congruence	1	0.77	.38
Product Type	1	2.56	.11
Congruence x Product Type	1	0.24	.88
Error	157		

Manova results for the effects on consumer evaluations.

was found for brand reliability (F(1, 157) = 5.23, p = .02) as well as a marginally significant effect on product reliability (F(1, 157) = 3.03, p = .08), but not for appeal (F(1, 157) < 1, *ns*.) and purchase intention (F(1, 157) < 1, *ns*.). Further analysis confirmed that the advertisements were rated to be more reliable, if the product and the brand were congruent rather than incongruent for both product and brand reliability. Accompanying means and standard deviations for product reliability and brand reliability are displayed in Table 3.

Table 3.

Means and standard deviations	of the	effect of	f congruence	and	incongruence	on	brand	and
product reliability.								

	Congruence			Incongruence			
-	М	SD	N	М	SD	N	
Brand reliability	3.97	0.12	79	3.58	0.12	82	
Product reliability	3.97	0.13	79	3.67	0.12	82	

Note. Values are the mean of reported scores on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*).

Additionally, a significant main effect of product type on product reliability was revealed (F(1, 157) = 6.23, p = .01). Utilitarian products were rated to be more reliable (M = 4.03, SD = 0.12) than hedonic products, (M = 3.60, SD = 0.13). However, no significant effect of the interaction of congruence and product type could be found.

Based on these findings the first hypothesis was confirmed with regard to judgements of product reliability and brand reliability. Consequently, the following analysis will be focussing on further effects on brand reliability and product reliability.

The mediating effect of processing fluency

In line with the second hypothesis, mediation analysis, as outlined by Baron and Kenny (1986), was conducted. It was tested whether processing fluency mediates the influence of congruence on the consumer evaluation. Specifically, enhanced processing fluency caused by congruence was hypothesized to result in more positive judgements of brand and product reliability and processing fluency inhibited by incongruence was estimated to cause less

positive ratings of product and brand reliability. For the analysis the measure of vividness of evoked imagery was chosen to indicate processing fluency and was centred at its mean (cf. Muller, Judd, & Yzerbyt, 2005). Two analyses were conducted for brand reliability and product reliability, respectively.

The first analysis included congruence as independent variable and brand reliability as dependent variable. First, the influence of congruence on brand reliability was assessed and was found to be significant ($\beta = .18$, t = 2.30, p = .02). Next, congruence needed to be shown to have an effect on processing fluency. Performing another regression analysis on the influence of congruence on processing fluency yielded significant results ($\beta = .17$, t = 2.23, p = .03). Finally, for a mediation to take place the effect of the independent variable on the dependent variable needs to decrease in significance when the mediator is included in the analysis. Adding processing fluency as predictor in the regression analysis of the effect of congruence on brand reliability resulted in a non-significant effect of congruence on brand reliability was found to be significant ($\beta = .54$, t = 8.11, p < .01) and, therefore, was identified to mediate the effect of congruence on brand reliability. The results of the analysis are displayed in Figure 1.



Figure 1. Analysis of processing fluency as mediator for the effect of congruence on brand reliability.

Another analysis was performed with congruence as independent variable and product reliability as dependent variable. The first regression analysis revealed marginally significant β -weights for the influence of congruence on product reliability (β = .14, t = 1.73, p = .09). Furthermore, performing another regression analysis, the effect of congruence on processing fluency yielded significant results (β = .17, t = 2.23, p = .03). In the final regression analysis processing fluency was added as a predictor of product reliability, which diminished the effect of congruence on product reliability to a non-significant level (β = .07, t = 0.89, ns.). However, the effect of processing fluency on product reliability was found to be significant (β = .41, t = 5.57, p < .001) and thus, was shown to mediate the influence of congruence on product reliability. Results revealed by the regression analysis are depicted in Figure 2.



Figure 2. Analysis of processing fluency as mediator for the effect of congruence on product reliability.

Moderated mediation

The mediation of the influence of congruence on consumer judgements was hypothesized to be conditional. Specifically, it was expected that the mediation would depend on the product type. Since brand reliability and product reliability were the only variables that have been found to be mediated by processing fluency, the following analysis will be limited to these two variables. Here the effect of high processing fluency was assumed to be stronger and the effect of low processing fluency to be weaker for utilitarian products than for hedonic products.

The following analysis was conducted according to the procedure presented by Muller et al. (2005; also see Preacher, Rucker, & Hayes, 2007), consisting of a set of regression analyses. For the verification of a conditional mediation a number of premises need to be considered. First, the independent variable (IV) has to have an overall effect on the dependent variable that does not depend on the moderator (MOD). Also the IV should have a significant effect on the mediator (MED) and the effect of the MED on the dependent variable should be significant. Finally, this mediation should depend on the MOD. Specifically, the effect of the IV on the MED depends on the MOD or the effect of the MED on the outcome variable depends on the MOD.

Two analyses were conducted for the variables that have been shown to be influenced by congruence, brand reliability and product reliability. The first analysis was conducted including brand reliability as dependent variable, congruence as independent variable, processing fluency as mediating variable and product type as moderating variable. Table 4 portrays the results of the univariate statistics and bivariate correlations. As can be seen, congruence and processing fluency and congruence and brand reliability have been found to correlate as well as processing fluency and brand reliability.

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Variable	CONG (Treatment)	PRT (Moderator)	PFL (Mediator)	BRE (Outcome)			
М	-0.020	0.000	0.000	3.770			
SD	1.003	1.003	0.936	1.097			
Correlations							
CONG		006	.174*	.180*			
PRT			.000	028			
PFL				.557**			
BRE							

Univariate and I	Bivariate Statistics	for Moderated	Mediation c	of brand reliability.
0		10. 1.100000.000000	1.1000000000000000000000000000000000000	

Table 4.

Note. CONG = congruence; PRT = product type; PFL = processing fluency; BRE = brand reliability. * p < .05. ** p < .01.

Next, the regression analysis has been conducted, in order to validate the moderated mediation. The results are displayed in Table 5. The first two columns show that the IV has a significant influence on the MED as well as on brand reliability. Further, the influence of the interaction of the IV and the MOD has not been found to be significant in both cases. In the right column it can be seen that the effect of the IV on brand reliability vanishes when the MED is added to the analysis. Again, this provides proof for mediation by processing fluency. Moreover, the interaction of MED and MOD has a marginally significant influence on brand reliability. By including this effect, all requirements have been fulfilled and it can be said that a moderated mediation has been found.

	Effects on processing Effects on brand fluency reliability		Effects on processing fluency		on brand oility	Effect rel	s on brand iability
Predictors	b	t	b	t	b	t	
IV	.163	2.221**	.196	2.287**	.092	1.252	
MOD	.001	0.009	029	-0.342	029	-0.396	
IV*MOD	.025	0.342	009	-0.105	003	-0.043	
MED					.664	8.300***	
IV*MED					032	-0.404	
MED*MOD					138	-1.724*	

Table 5.Regression results for conditional mediation for brand reliability.

Note. IV = congruence; MOD = product type; MED = processing fluency. * p < .10. ** p < .05. *** p < .001.

The effects of congruence, processing fluency and product type on brand reliability are displayed in Figures 3a and 3b. It can be seen that under conditions of low processing fluency utilitarian products were rated slightly less favourable than hedonic products, while ratings of utilitarian products exceeded those of hedonic products if processing fluency was high. This effect is slightly more prominent for congruence rather than incongruence. Although differences appear to be small, their significance has been confirmed by the regression analysis.



Figure 3a. Congruence

Table 6.



The second analysis was performed with congruence as independent variable, processing fluency as mediator, product type as moderator and product reliability as dependent variable to establish the moderated mediation for product reliability. First, the univariate statistics and bivariate correlations are shown in Table 6. Using the current variables, the effects that have been found include the correlation of congruence and processing fluency, correlation of product type and product reliability as well as processing fluency and product reliability.

Variable	CONG (Treatment)	PRT (Moderator)	PFL (Mediator)	PRE (Outcome)
М	-0.020	0.000	0.000	3.818
SD	1.003	1.003	0.936	1.136
Correlations				
CONG		006	.174*	.136
PRT			.000	195*
PFL				.419**
PRE				

Univariate and Rivariate Statistics	for Moderated Mediation	of product reliability
Univariate and Divariate Statistics	jor moderated mediation	of product reliability.

Note. CONG = congruence; PRT = product type; PFL = processing fluency; PRE = product reliability. * p < .05. ** p < .01.

In Table 7 the results of the regression models are presented. A moderated mediation could not be confirmed by the current data, because not all requirements were fulfilled. As displayed in the first two columns the IV has a significant influence on the MED and a

marginally significant effect on product reliability. This relation is not influenced by the MOD. However, the MOD has a uniquely significant influence on product reliability that even increases when the MED is included in the analysis. Additionally, the MED has a significant influence on product reliability and the effect of the IV diminishes when the MED is included, by which the mediation can be confirmed. Rather than a moderated mediation it can be stated that product reliability is mediated by processing fluency and that the product type has a unique influence on product reliability.

Table 7.

	Effects on flue:	processing ncy	Effects on product reliability		Effects rel	on product iability
Predictors	b	t	b	t	b	t
IV	.163	2.221**	.153	1.740*	.071	0.878
MOD	.001	0.009	219	-2.496**	219	-2.732***
IV*MOD	.025	0.342	.025	0.282	.035	0.425
MED					.521	5.859***
IV*MED					006	-0.064
MED*MOD					141	-1.582

Regression results for conditional mediation for product reliability.

Note. IV = congruence; MOD = product type; MED = processing fluency. * p < .10. ** p < .05. *** p < .01.

Discussion

The current research was conducted in order to estimate the effects of congruence of the product and the brand on consumer evaluations. Three hypotheses were proposed and tested for a number of different evaluation criteria. The results of the study confirm prior research on the role of congruence in enhancing evaluations. Further, considering influences of processing fluency, this study contributed to the apprehension of the process by which consumer judgements are enhanced. Finally, the type of product was assumed to influence the effects of processing fluency. Evidence of this relationship, however, was limited and further research is required to validate this approach.

In line with earlier research on positive effects of congruence (Govers & Schoormann, 2005; Grohmann, 2009; Van Rompay & Pruyn, in press) the current study could indeed confirm the enhancing influence for brand-product congruence. Similar to findings by Van Rompay and Pruyn (in press) congruence caused the product and the brand to be perceived as more reliable than incongruence. A brand incorporating the same values as the product it promotes makes identification of the information easier for the customer (Hekkert, 2006). Apparently, facilitated identification accounts for ratings of reliability. It can be argued that consumers experience less uncertainty and lower risk, if the given information is consistent so that they can easily interpret it (Tversky & Shafir, 1992). Being able to correctly evaluate the product or brand in an instant gives the consumer more security about the attributes, which seems to enhance reliability ratings. Providing consumers with unambiguous and conforming messages to promote reliability is believed to be advantageous. It is expected that reliability will encourage approach behaviour, such as extended viewing, seeking information, and visiting a retailer selling the product, rather than avoidance behaviour, such as distancing and unwillingness to purchase (Bloch, 1995). Eventually this means that a product or brand estimated to be reliable is more likely to be purchased than a product or brand that appears to be less reliable.

Another explanation of the enhancing effect of congruence on consumer evaluations could be the influence of processing fluency. Congruence has been shown to enhance processing fluency, which in turn has been found to enhance consumer judgements (Labroo & Lee, 2006; Lee & Aaker, 2004; Van Rompay & Pruyn, in press; Van Rompay et al., in press). The prior findings concerning processing fluency could be reproduced in this study, which confirms the second hypothesis. More specifically, participants could process the congruent stimulus material more easily than the incongruent material, so that brand-product congruence increased the participants' rating of reliability. As outlined above, the unique enhancing effect of congruence on reliability diminished when processing fluency was included in the regression analysis. This means that processing fluency mediates the influence of congruence and accounts for the effect on reliability. Knowing that processing fluency causes the increase in consumer response it can be argued that consumer evaluations are based on the misattribution of the pleasant experience of high processing fluency. This stresses the importance of congruence among and within the marketing mix, since processing fluency can be enhanced by means of congruence. Moreover, investigating mediators of the enhancing effect allows for more precise shaping of the consumer's response.

The current study further assessed the difference between hedonic and utilitarian products, because they are assumed to vary in the way they correspond to processing fluency. As a matter of fact, product type was found to moderate the effect of processing fluency on the evaluation of brand reliability. As predicted by the hypothesis, ratings were more distinguished for utilitarian products than for hedonic products. It appears that utilitarian products are rated as less positive than hedonic products when processing fluency is low and as more positive than hedonic products when processing fluency is high. Earlier research has shown that high processing fluency indicates familiarity and safety (Winkielman et al., 2003). For utilitarian products this feeling of safety enhances consumer ratings of the brand, because utilitarian products are mainly purchased for functional purposes and are mostly expected to efficiently solve a problem. In contrast, the evaluation of the brand benefited less from high processing fluency for the hedonic product. This is because hedonic products are purchased for their entertainment value, but nothing novel or thrilling was offered that could stimulate more processing. In this regard, research has demonstrated that incongruence might be used to elicit positive effects (Ludden et al., 2008; Pocheptsova et al., 2009; Silvia, 2005). However, constructs other than reliability are required to assess this effect, because low reliability is actually not expected to be desirable, but rather less important, if the product or brand can be made more interesting, special, or surprising by incongruence.

Alternatively, it is possible that utilitarian products generally are more associated with reliability, which caused the enhanced ratings. According to this notion utilitarian products are rated as more sincere than hedonic products and hedonic products are rated, for instance, as more exciting (Ang & Lim, 2006). In fact, that is what was revealed by the analysis of product reliability. In line with the study by Ang and Lim (2006) product type had a unique direct effect on product reliability with utilitarian products being rated as more reliable than hedonic products. Contrary to the proposition it appears that product evaluations are directly influenced by product type and that only brand evaluations are moderated by product type.

In terms of practical implications, the current research on the topic of effects of congruence on consumer evaluations further enables marketers to shape the perception of their brands and products. Positive effects on consumer responses have been extended to congruence across additional elements of the marketing mix. Considering the match of the product with the brand, gives marketers the opportunity to determine the consumers' evaluation of the product and the brand and to further distinguish their product from other similar products by promoting perceptions of, for instance, reliability.

In general, increasing consumer evaluations appears to be an attractive strategy from the viewpoint of sales. More positive judgements of brands and products will promote consumers' approach behaviour. In this regard, designers can stimulate sales by evoking desired consumer perceptions. A possible approach, as outlined by this study, is aligning the elements of the marketing mix to form a favourable holistic presentation of the product. However, in order to adjust the various factors, such as the brand, the product, the packaging, or the advertisement, in the most profitable way it is important to know which arrangements evoke the most beneficial consumer ratings. Hence, research in the field of congruence provides means to shape the response of the consumer and thereby promotes sales.

With regard to limitations the current study focused on processing fluency evoked by congruence. However, earlier studies also used other means to achieve high processing

fluency, such as figure-ground contrasts or colour contrasts (Reber et al., 1998; Reber & Schwarz, 1999). Future research could assess whether other components, for instance distinction of colours of packaging and typeface or complexity of product descriptions, could be used to achieve similar effects of processing fluency. Extending the knowledge concerning effects of processing fluency would contribute to prior research by providing additional possibilities to influence consumer choice and by revealing potential interferences.

Furthermore, the present investigation of moderating factors was limited to product type. It can be argued that products can be distinguished by other categories than the product type. Previous research has indicated that involvement plays a significant role in effects of congruence (Childers & Jass, 2002; Kressmann et al., 2006). According to this approach more effort is put into extensive evaluation under high involvement than under low involvement, which is believed to cause variance in the effect of congruence. This means that effects of congruence are more prominent for the evaluation of a product that bears low financial risk and is purchased on a regular basis, such as soda, than for a product that is more expensive and purchased only occasionally, such as a car. Similarly, Pocheptsova (2009) distinguishes between everyday products and special occasion products. In this approach it is argued that high processing fluency promotes evaluations of everyday products, because of the experienced familiarity. In contrast, special occasion products were found to profit from low processing fluency, because of enhanced perceptions of infrequency and high value. It would be interesting to assess which of these notions holds out against further research.

Establishing the effects of congruence of the product and the brand on consumer evaluations provides further means to lure customers into purchase. In this respect, the current study highlights the importance of consumption purposes and consumers' appreciation of processing fluency. Thus, it is recommended that marketers use more differentiated marketing strategies in order to design more attractive products and to increase sales.

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Appendix

Appendix A



a. Confrontational brand

b. Harmonious brand

Appendix B

Harmonious products.



a. Hedonic product



b. Utilitarian product

Confrontational products.



a. Hedonic product

b. Utilitarian product

Appendix C



a. Example of harmonious brand with harmonious utilitarian product.



b. Example of confrontational brand with confrontational hedonic product.

Appendix D

Brand reliability.

- a. oprecht sincere
- b. serieus serious
- c. betrouwbaar reliable
- d. eerlijk honest
- e. verantwoord responsible
- f. kwaliteitsgericht quality oriented

Product reliability.

- a. In hoeverre vind je dit product betrouwbaar? To what extend do you think this product is reliable?
- b. In hoeverre denk je dat je bij dit product waar voor je geld krijgt? To what extend do you think you get value for your money for this product?

c. In hoeverre vind je dit product verantwoord? – To what extend do you think this product is responsible?

Appeal.

- a. aantrekkelijk attractive
- b. tevredenstellend satisfactory
- c. leuk nice
- d. gunstig favourable
- e. voordelig advantageous
- $f. \quad goed-good$

Purchase intention.

- a. Hoe waarschijnlijk is het dat je voor dit product zou kiezen als je zelf iets te drinken zou willen kopen? - How likely is it that you would choose this product if you liked to buy something to drink?
- b. Zou je dit product kopen? Would you buy this product?
- c. Als je van plan was om een product van dit type te kopen, zou je voor dit product kiezen? – If you were planning to buy a product of this type, would you choose this product?