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Publisher: Taylor & Francis

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Journal of Health Communication: International Perspectives

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/uhcm20>

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Available online: 31 May 2012

To cite this article: Simone M. de Droog, Moniek Buijzen & Patti M. Valkenburg (2012): Use a Rabbit or a Rhino to Sell a Carrot? The Effect of Character-Product Congruence on Children's Liking of Healthy Foods, *Journal of Health Communication: International Perspectives*, DOI:10.1080/10810730.2011.650833

To link to this article: <http://dx.doi.org/10.1080/10810730.2011.650833>



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Use a Rabbit or a Rhino to Sell a Carrot? The Effect of Character–Product Congruence on Children’s Liking of Healthy Foods

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This study investigated whether unfamiliar characters are as effective as familiar characters in stimulating children’s affective responses toward healthy foods. In particular, the authors investigated whether an unfamiliar character which is congruent with a product can be as effective as a familiar character. The authors tested 2 types of character–product congruence: conceptual congruence (on the basis of a familiar link), and perceptual congruence (on the basis of color similarity). In a repeated measures design, 166 children (4–6 years old) were exposed to a picture of a carrot combined randomly with 5 different types of character: an (incongruent) familiar character and four unfamiliar characters varying in character–product congruence (i.e., both conceptually and perceptually congruent, conceptual only, perceptual only, and incongruent). The authors measured children’s automatic affective responses toward these character–product combinations using a time-constrained task, and elaborate affective responses using a nonconstrained task. Results revealed that the conceptually congruent unfamiliar characters were just as effective as the familiar character in increasing children’s automatic affective responses. However, the familiar character triggered the most positive elaborate affective responses. Results are explained in light of processing fluency and parasocial relationship theories.

Brand characters, which are images of (animated) animals or people connected to a brand, are used on almost three quarters of food products targeted toward children (Elliott, 2008; Harris, Schwartz, & Brownell, 2009). It has become one of the most popular techniques for promoting food products to children. Brand characters have recently been used for fruit and vegetables, with the purpose of increasing children’s liking of healthy food products (Harris et al., 2009; Institute of Medicine, 2006). Several studies have shown that brand characters can increase children’s affective responses toward food products, including healthy foods (Atkin, 1975; de Droog, Valkenburg, & Buijzen, 2011; Lapierre, Snyder, D’Alessandro, 2006; Macklin, 1994; Mizerski, 1995; Neeley & Schumann, 2004). However, little is known about how variations in character design may influence children’s responses toward food products.

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Although brand characters have been studied predominantly as a homogeneous phenomenon, these characters may differ on many dimensions. One such dimension is their degree of familiarity to children. In general, it is assumed that media characters that children are familiar with, such as *SpongeBob SquarePants* and *Dora the Explorer*, are more effective than unfamiliar characters developed specifically for the brand (Hoffner, 1996; McNeal, 1999, 2007; Rust, 1993). However, the only empirical study to compare these two types of characters explicitly (de Droog et al., 2011), showed that an unfamiliar character can be as effective as a familiar one. In this study, the familiar SpongeBob character and an unfamiliar monkey character increased children's positive affective responses toward bananas.

To account for this unexpected result, de Droog and colleagues (2011) suggested that the unfamiliar character's success may be a result of its high level of congruence with the product. After all, the combination of monkeys and bananas is a familiar script to children. This may imply that character-product congruence is a second key dimension on which brand characters may vary. As yet, the hypothesis that a higher degree of character-product congruence results in more positive affective responses has not been investigated systematically.

Therefore, the aim of the present study is to extend that of de Droog and colleagues (2011) by investigating the effect of character-product congruence on children's affective responses toward healthy foods. More specifically, we investigate whether an unfamiliar character that is congruent with a product is as effective as an (incongruent) familiar character. We investigated two types of character-product congruence. The first is conceptual congruence, where the character and product are narratively linked (i.e., a gray rabbit paired with a carrot). The second is perceptual congruence, where the character and product have the same color (i.e., an orange rhino paired with a carrot). We compared these various unfamiliar characters to a familiar character in terms of how they differentially influence children's affective responses toward the character-product combinations. Our focus is children's affective responses as these are considered the most important precursors to product preference and, consequently, consumption (Calvert, 1999; Institute of Medicine, 2006).

Effectiveness of Familiar Media Characters

Two theories may explain the effectiveness of familiar media characters: (a) processing fluency theory (Bornstein, 1989; Bornstein & D'Agostino, 1994; Bornstein, Leone, & Galley, 1987; Jacoby, Kelley, & Dywan, 1989; Weisbuch & Mackie, 2009; Weisbuch, Mackie, & Garcia-Marques, 2003) and (b) parasocial relationship theory (Acuff & Reiher, 1997; Hoffner, 1996; Lemish, 2007; McNeal, 2007). These two theories each predict different types of affective responses, with processing fluency expected to induce an automatic affective response and parasocial relationship formation expected to induce an elaborate affective response.

The first theory, *processing fluency*, refers to the ease with which people recollect or perceive information. For example, images and ideas with which people are familiar, and have thus developed mental schemas for, are more fluently processed pre-consciously than new images and ideas (Jacoby et al., 1989; Weisbuch & Mackie, 2009). Processing fluency is positive and pleasant in nature (Reber, Winkielman, & Schwarz, 1998). Unaware of the source of this pleasant feeling, people tend to misattribute it to a certain quality of the stimulus, leading to positive automatic affective

responses (Bornstein, 1989; Bornstein & D'Agostino, 1994; Jacoby et al., 1989). For example, the pleasant feeling from processing a familiar person can be misattributed to a product that is associated with that person, with the result that this product is automatically more liked and preferred (Bornstein et al., 1987; Weisbuch et al., 2003).

By means of frequent exposure, media characters become familiar images that children have developed mental schemas about. These schemas render character processing more fluent at a subsequent exposure. When children encounter a product depicting a familiar character, the ease of processing of the character triggers positive automatic affective responses, which may be misattributed to the product. Thus, processing fluency theory predicts that combining a product with a familiar media character will induce positive automatic affective responses among children.

The second theory, *parasocial relationship theory*, has been used to describe the affective bond that people develop with media characters following frequent media exposure. When people get to know a character and learn about its personality and behavior, the character may be perceived as a close friend (Hoffner, 2008). Because parasocial relationships resemble many of the characteristics of real relationships, people may develop deep emotions for media characters (Hoffner, 1996, 2008). Such relationship formation is typically motivated by the need for companionship, which emerges in early childhood (Hoffner, 2008). Children are particularly sensitive to the formation of parasocial relationships with animated media characters (i.e., talking and interacting with the characters on screen) and often search for ways to become closer to their character friends (de Droog et al., 2011; Hoffner, 1996, 2008; Lemish, 2007; Valkenburg, 2004).

Children are aware of their positive affect for media characters, meaning that parasocial relationship formation induces an elaborate (i.e., deliberate and conscious) affective response (Wittenbrink & Schwarz, 2007). Positive elaborate affective responses toward media characters may transfer onto products upon that character is depicted, leading to preferences for those products (Acuff & Reiher, 1997; McNeal, 2007). Thus, parasocial relationship theory predicts that combining a product with a familiar media character will induce positive elaborate affective responses among children.

Increasing Positive Affective Responses toward Unfamiliar Characters

As argued earlier, familiar media characters may induce both automatic and elaborate affective responses via processing fluency and parasocial relationship formation. A possible means of increasing the influence of unfamiliar characters on children's affective responses toward healthy foods, could be to stimulate one of these processes. Children are unlikely to form parasocial relationships with unfamiliar characters because they are typically static images on products without widespread media exposure. Elaborate affective responses are thus rendered improbable. However, children may generate positive automatic affective responses to unfamiliar characters, as previous (media) exposure is not a necessary condition for processing fluency to occur. Research suggests that fluent processing can be achieved not only by character familiarity, but also by congruence between the character and the product (De Vries & Van Rompay, 2009; Reber et al., 1998; Russell, 2002; Van Rompay, De Vries, & Van Venrooij, 2010).

Congruence refers to “the degree to which two stimuli match or fit together” (Garretson & Niedrich, 2004, p. 27). In the case of character–product congruence, this concerns the degree to which the character is perceived as a match for the product. For example, the *M&M’s* characters Red and Yellow fit very well with the *M&M’s* product in that their shape and color resemble the chocolate candy. According to Jacoby and colleagues (1989), congruent stimuli are processed more fluently than incongruent stimuli because they correspond with previously seen or heard images and ideas. As a consequence, similar to previously encountered stimuli, congruent stimuli may trigger positive automatic affective responses. For example, studies have shown that congruent advertisements (e.g., in which the picture and text are well matched) are more fluently processed than incongruent advertisements, resulting in more positive product evaluations (De Vries & Van Rompay, 2009; Van Rompay et al., 2010).

In conclusion, unfamiliar characters are unlikely to stimulate parasocial relationship formation. However, they can stimulate fluent processing through character–product congruence. In particular, unfamiliar characters are expected to trigger positive automatic affective responses toward a character and healthy food product when children perceive the character to be congruent with the product.

Conceptual and Perceptual Congruence Between Character and Product

As indicated earlier, we distinguish between two types of congruence: conceptual and perceptual. We derive these two types of congruence from processing fluency theories assuming that information may be processed more fluently through conceptual fluency and perceptual fluency (Auty & Lewis, 2004; Jacoby et al., 1989; Lee & Labroo, 2004; Tulving & Schacter, 1990). As yet, neither type of processing fluency has been linked to congruence in character–product combinations.

Conceptual fluency refers to the ease with which a concept (e.g., an argument, idea, or script) comes to mind (Jacoby et al., 1989; Lee & Labroo, 2004). For example, when a man enters a bar, we expect him to order a beer and not a bottle of vitamins (Lee & Labroo, 2004). Likewise, we expect monkeys to eat bananas and not hamburgers (de Droog et al., 2011). The basic assumption is that familiar concepts (e.g., monkeys eat bananas) are processed more fluently and thus trigger more positive affective responses than less familiar concepts (e.g., monkeys eat hamburgers). Therefore, in the present study, we anticipate that a character–product combination that is conceptually congruent (i.e., a rabbit paired with a carrot) will lead to more positive automatic affective responses than an incongruent character–product combination.

Perceptual fluency refers to the physical features of a stimulus, such as shape and color, which may enhance processing fluency (Lee & Labroo, 2004; Reber et al., 1998). For example, studies have shown that similarity with the original stimulus (e.g., the shape of a *Pepsi* bottle; Auty & Lewis, 2004) and specific features of the stimulus (e.g., high visual clarity; Reber et al., 1998) increase processing fluency and, in turn, trigger positive affective responses. In the present study, we investigate how a color match between the character and product may increase processing fluency. We anticipate that character–product combinations that are perceptually congruent (i.e., an orange character paired with a carrot) will lead to more positive automatic affective responses than incongruent character–product combinations.

Hypotheses

In summary, the present study investigates the effect of conceptually and perceptually congruent character–product combinations on children’s affective responses. We compare children’s affective responses to four types of unfamiliar character–product combinations (i.e., conceptually and perceptually congruent, conceptually congruent, perceptually congruent, and incongruent) with their affective responses to a familiar character–product combination. We anticipate that familiar characters will induce positive automatic affective responses through processing fluency and elaborate affective responses through parasocial relationship formation. Unfamiliar characters are expected to only trigger automatic affective responses through processing fluency. We hypothesized the following:

- Hypothesis 1: Children will display more positive automatic affective responses toward familiar and congruent character–product combinations than toward an incongruent character–product combination.
- Hypothesis 2: Children will display more positive elaborate affective responses toward a familiar character–product combination than toward all types of unfamiliar character–product combinations.

Method

Sample

In June and July 2009, 166 children (51% boys, 49% girls) were recruited from four primary schools situated in suburban and rural districts of The Netherlands. The sample consisted of 56% preschool children (4–5 years of age) and 44% kindergarten children (5–6 years of age) from various socioeconomic and cultural backgrounds. Before the study, parents received an information letter and were asked to complete a consent form.

Design and Procedure

The study had a within-subjects (repeated measures) design in which all children were exposed, in random order, to five different character–product combinations: a carrot with (a) a familiar character, (b) a conceptually perceptually congruent unfamiliar character, (c) a conceptually congruent unfamiliar character, (d) a perceptually congruent unfamiliar character, and (e) an incongruent unfamiliar character (see Table 1). After each exposure, we measured children’s automatic and elaborate affective responses toward that character–product combination.

Children were interviewed individually in a quiet room in their school by a female experimenter. They were informed that they could stop participating at any time they wished. The experiment was conducted using a 12-inch touchscreen notebook (*HP Pavilion tx2-1150*) with which the children were first familiarized. Throughout the experiment, children were shown pictures of products and characters on the screen and were asked to respond to the different questions by touching the screen. To ensure that children understood the tasks, the automatic and

Table 1. The five character–product combinations used in this study

Type of character	Character–product combination
1. Familiar character Unfamiliar characters:	Dora/Diego ^a and carrot
2. Conceptually perceptually congruent	Orange rabbit and carrot
3. Conceptually congruent	Gray rabbit and carrot
4. Perceptually congruent	Orange rhino and carrot
5. Incongruent	Gray rhino and carrot

^aDora was used for the participating girls and Diego was used for the participating boys.

elaborate affective response tasks were initially rehearsed using character–product combinations which were not included in the analyses.

The study began with a short manipulation check in which we measured children’s perceived congruence of the various character–product combinations. Within this task, a picture of a product was shown in the top half of the screen and two of the five characters were shown randomly in the bottom half of the screen (until each character had been compared with the other four characters). Children were asked to touch the character on the screen that they believed best matched the product.

After the manipulation check, children were exposed to the five different character–product combinations and asked whether and how much they liked them. There was only one character–product combination in the top half of the screen at the time. At the bottom half of the screen, children could respond by touching a smiley face on a smiley scale that best represented their affect. Automatic affective responses were measured using a time-constrained task (Wittenbrink & Schwarz, 2007), in which children were asked to respond by touching the smiley face on the screen as fast as they could. The experimenter presented the task as a game (“Are you ready? 3 . . . 2 . . . 1 . . . Go!”), and encouraged the child during the task (“Go on!”, “You’re doing great!”). Elaborate affective responses were measured using a nonconstrained task, in which children were given time to think before they answered. After each task, a short pause was inserted in order to explain and practice the following task.

After the experimental session, children were taken back to the classroom and received a small gift for their participation. The majority of children expressed that they had enjoyed the study and would like to play “the game” again. This suggests that using a touchscreen notebook to conduct time-constrained tasks is appropriate for young children. The study took approximately 10 minutes per child.

Stimulus Materials

A picture of a carrot was used as the healthy food product. A picture of a popular television character that was neither perceptually nor conceptually congruent with carrots, was selected for the familiar character. Dora was used for the participating girls and Diego for the boys (both characters from the TV show *Dora the Explorer*) because these were the most popular characters among Dutch 4–6-year-old children at the time of our study (IPM Kidwise, 2009). For the unfamiliar characters, we selected pictures designed by one artist (see Figure 1). The character both conceptually and perceptually congruent was an orange rabbit. The conceptually congruent

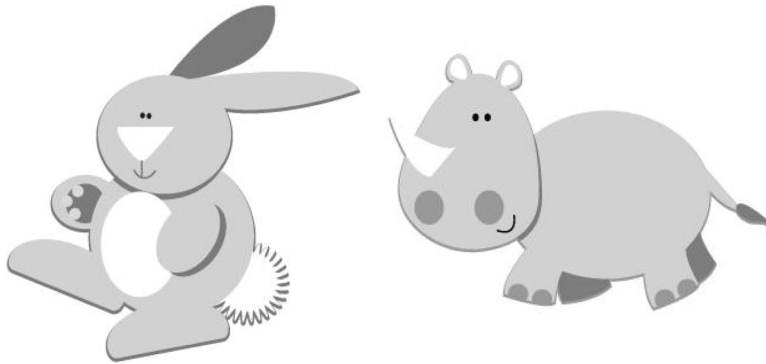


Figure 1. The gray rabbit (conceptually congruent) and gray rhino (conceptually incongruent) used in this study. In the case of perceptual congruence, both animals were orange.

character was a gray rabbit. The perceptually congruent character was an orange rhino, and the incongruent character was a gray rhino (for an overview, see Table 1).

Measures

Automatic Affective Responses

To measure automatic affective responses, children were presented with the five character–product combinations, one at a time, in random order, in the top half of the screen. An automatic response was triggered by asking the children to respond as fast as they could. For each combination, they were asked to express on a dichotomous smiley scale (unhappy face, happy face) whether they liked the character–product combination. Each character–product combination could score a 0 for *dislike* or a 1 for *like*, $M = 0.74$, $SD = 0.43$, range = 0–1.

Elaborate Affective Responses

To measure elaborate affective responses, children were again presented with the character–product combinations, one at a time, until all five combinations had been shown. A more elaborate response was triggered by allowing children time to think before they answered. For each combination, they were asked to express how much they liked each character–product combination, on a 4-point smiley scale from unhappy face to happy face, and which ranged from 1 (*not at all*) to 2 (*a little bit*), 3 (*quite a bit*), and 4 (*very much*), $M = 3.05$, $SD = 1.07$, range = 1–4.

Manipulation Checks

The television characters that we used were familiar: 91% of the children were able to recall the names Dora and Diego. Second, all children were able to correctly classify the rabbit as a rabbit. 10% of the children were unable to correctly classify the rhino, but gave sufficient answers of animals that do not typically eat carrots (such as “dinosaur”). Third, each character individually received a mean score of 3 or higher on our four-point-elaborate-liking-scale, indicating that all five characters were liked by the children. A repeated measures analysis of variance revealed that the children liked the familiar character ($M = 3.48$, $SD = 0.93$) more than the unfamiliar characters: $F(4, 660) = 7.12$, $p < .01$. This is in line with our expectations as children

are anticipated to display greater elaborate affective responses toward familiar media characters. Also in line with our expectations, Bonferroni post hoc tests revealed that children did not differ significantly in their liking of the unfamiliar rabbits (gray rabbit: $M = 3.25$, $SD = 1.04$; orange rabbit: $M = 3.17$, $SD = 1.10$) and rhino's (gray rhino: $M = 3.00$, $SD = 1.06$; orange rhino: $M = 3.04$, $SD = 1.06$).

Last, we also checked which characters the children perceived as congruent with a carrot. Recall that each character was compared to another character, until all five characters had been compared with one another. During each comparison, the character perceived as most congruent with the carrot scored one point. Each character could thus score a minimum of zero and a maximum of four points. We then performed a repeated measures analysis of variance with perceived character-product congruence as the dependent variable. Mauchly's test indicated that the assumption of sphericity was not met, $\chi^2(9) = 31.65$, $p < .05$. Therefore, the degrees of freedom were corrected using Greenhouse-Geisser estimates of sphericity ($\epsilon = .92$). The analysis revealed a significant main within-subjects effect for character-product congruence, $F(3.68, 606.73) = 121.10$, $p < .001$. Bonferroni post hoc tests indicated that children perceived the conceptually perceptually congruent character (orange rabbit: $M = 3.19$, $SD = 0.89$) as the most congruent with a carrot. The conceptually congruent character (gray rabbit: $M = 2.73$, $SD = 0.98$) was also perceived as a good match for the carrot, scoring significantly higher than the perceptually congruent character (orange rhino: $M = 1.69$, $SD = 1.00$). As anticipated, children perceived the incongruent character (gray rhino: $M = 1.11$, $SD = 0.86$) and the familiar character (Dora/Diego: $M = 1.28$, $SD = 1.07$) as the least congruent.

Results

To test whether children displayed more positive automatic affective responses toward familiar and congruent character-product combinations than toward an incongruent character-product combination (Hypothesis 1), and whether they displayed more positive elaborate affective responses toward a familiar character-product combination than toward all types of unfamiliar character-product combinations (Hypothesis 2), we performed a repeated measures analysis of variance with automatic affective responses and elaborate affective responses as the dependent variables. As Mauchly's test indicated that the assumption of sphericity had not been met for the main effects of automatic affective responses, $\chi^2(9) = 32.39$, $p < .05$, and elaborate affected responses, $\chi^2(9) = 28.32$, $p < .05$, the degrees of freedom were again corrected using Greenhouse-Geisser estimates of sphericity ($\epsilon = .91$ and $\epsilon = .93$, respectively).

Children's automatic affective responses (Hypothesis 1) are presented in the first column of Table 2. The analysis yielded a significant main within-subjects effect for the automatic affective responses, $F(3.62, 597.85) = 7.29$, $p < .001$. Bonferroni post hoc tests revealed that the familiar, the conceptually perceptually congruent, and the conceptually congruent character-product combinations triggered similar automatic affective responses which were all significantly more positive than the automatic affective responses triggered toward the perceptually congruent and the incongruent character-product combinations.

Children's elaborate affective responses (Hypothesis 2) are presented in the second column of Table 2. The analysis yielded a significant main within-subjects effect for the elaborate affective responses, $F(3.70, 610.65) = 18.52$, $p < .001$.

Table 2. Mean scores on children’s automatic and elaborate affective responses to different types of character

Type of character	Automatic affective responses		Elaborate affective responses	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
1. Familiar character	0.81 ^a	0.39	3.52 ^a	0.91
Unfamiliar characters:				
2. Conceptually perceptually congruent	0.81 ^a	0.39	3.15 ^b	1.07
3. Conceptually congruent	0.80 ^a	0.40	3.16 ^b	1.02
4. Perceptually congruent	0.64 ^b	0.48	2.73 ^c	1.19
5. Incongruent	0.66 ^b	0.48	2.70 ^c	1.17

^{a,b}Column differences with different superscripts are significant at least at $p < .05$.

Bonferroni post hoc tests and within-subjects contrasts revealed that the familiar character–product combination triggered significantly more positive elaborate affective responses than all types of unfamiliar character–product combinations: conceptually perceptually congruent, $F(1, 165) = 11.12, p < .01$; conceptually congruent, $F(1, 165) = 12.10, p < .01$; perceptually congruent, $F(1, 165) = 45.90, p < .001$; and incongruent, $F(1, 165) = 46.31, p < .001$. In turn, the conceptually perceptually congruent and conceptually congruent character–product combinations triggered significantly more positive elaborate affective responses than the perceptually congruent and incongruent character–product combinations.

Discussion

This study investigated whether unfamiliar characters can be as effective as familiar characters in enhancing children’s affective responses toward a carrot. Specifically, we investigated whether an unfamiliar character which is congruent with a carrot can be as effective as a familiar character. The study is unique in three respects. First, we compared various unfamiliar characters with a familiar media character. Second, we tested two kinds of character–product congruence: conceptual congruence (based on a familiar link between the character and product) and perceptual congruence (based on color similarity between the character and product). Third, our study measured two types of affective responses: automatic affective responses (triggered by limiting children’s response time) and elaborate affective responses (triggered by allowing children sufficient time to think about their answers).

In agreement with our first hypothesis, children displayed more positive automatic affective responses toward familiar and conceptually congruent character–product combinations than toward the incongruent character–product combination. Thus, an unfamiliar character which is congruent with a product can be just as effective in increasing children’s automatic affective responses as a familiar media character. This can be explained by processing fluency theory, which assumes that congruence enhances fluent processing, thus eliciting positive automatic affective responses (e.g., De Vries & Van Rompay, 2009; Van Rompay et al., 2010).

In line with processing fluency theory, the character–product combinations perceived as most congruent by the children (i.e., conceptually congruent and both

conceptually and perceptually congruent) were also most effective in increasing children's automatic affective responses. In contrast, the perceptually congruent character-product combination was not perceived as congruent by the children and consequently triggered less positive automatic affective responses. In fact, this character-product combination proved as ineffective as the incongruent unfamiliar character-product combination. This corroborates previous findings suggesting that only a *perceived* congruent combination can trigger automatic affective responses as a result of processing fluency (De Vries & Van Rompay, 2009; Jacoby et al., 1989; Van Rompay et al., 2010).

That perceptual congruence failed to induce an automatic affective response indicates that color similarity alone was insufficient to be perceived as congruent. It is conceivable that a character resembling not only the color but also the shape of a product, such as the *M&M's* characters, has a greater chance of being perceived as congruent by children. In addition, it is conceivable that perceptual character-product congruence based on color similarity would be more effective among children younger than those used in the present study. Developmental theories suggest that children younger than 4 years old are particularly sensitive to basic perceptual attributes, such as color and shape. As they also possess less developed categorical associated networks and have lower media experience with familiar animal-food-scripts (Macklin, 1994; Siegler, 1998; Valkenburg, 2004), these younger children are expected to pay little attention to conceptual cues and thus be affected less by conceptual fluency.

In agreement with our second hypothesis, children displayed more positive elaborate affective responses toward a familiar character-product combination than toward all types of unfamiliar character-product combinations. This supports our argument derived from parasocial relationship theory (e.g., Hoffner, 1996, 2008; Lemish, 2007), that relationship formation with a television character after multiple television exposures induces a strong conscious affective response toward that character and toward products depicting that character. Our findings also demonstrate that among the unfamiliar characters, the conceptually congruent character-product combinations triggered significantly more positive elaborate affective responses than the perceptually and incongruent character-product combinations. This cannot be explained by parasocial relationship theory as children received no prior exposure to these unfamiliar characters.

However, the unexpected result could be explained by Van Raaij's (1986) advertising processing model, which distinguishes between primary affective and secondary affective reactions. Although not identical, these concepts dovetail with the two types of affective responses we investigate in this study; the primary affective reaction linking to automatic affective response and the secondary affective reaction linking to elaborate affective response. According to Van Raaij (1986), the primary affective reaction is the initial impression of an advertisement and results from a fast, uncontrollable, passive evaluation process. In contrast, the secondary affective reaction is the result of a slower, more elaborate, active evaluation process. Van Raaij (1986) specified that these two processes are not necessarily distinct. Instead, the automatically formed primary affective reaction influences the elaborate formation of the secondary affective reaction. Thus, in our study, children's positive automatic affective responses toward the conceptually congruent character-product combinations may have led to positive elaborate affective responses.

Conclusions and Implications

In conclusion, the present study demonstrates that both processing fluency theory and parasocial relationship theory can be used to explain the effectiveness of brand characters. Our results suggest that both of these processes can be successfully applied in order to increase a character's effectiveness. However, the use of brand characters to influence children's consumer behavior evokes ethical issues (for a discussion, see Gosliner & Madsen, 2007). Much of this ethical criticism focuses on the use of familiar media characters. For example, it has been argued that media characters on food packages sell not only the food, but also the television show from which the character is known, thus promoting commercialization. In addition, some familiar media characters possess undesirable personality traits rendering them unsuitable as positive role models (Gosliner & Madsen, 2007).

The use of unfamiliar characters to promote healthy foods may overcome the disadvantages of using familiar media characters. For example, unfamiliar characters are not linked to a character brand or television show. Instead, they are developed solely to sell the product. Furthermore, as they appear largely in static form on product packaging, unfamiliar characters are unlikely to communicate any unwanted traits. Therefore, we believe that unfamiliar characters can be used to promote healthy foods among children. However, in order for these characters to be successful it is of vital importance that those involved in promoting healthy foods to children carefully consider the design of unfamiliar characters.

The present study and that of de Droog et al. (2011) have shown that the character must be at least conceptually congruent with the product. It is fortunate that healthy food products such as fruit and vegetables are typically easy to combine with narrative appropriate animals. In addition, our results indicate that conceptually congruent character–product combinations may be particularly effective in situations where children have little time to think (e.g., in retail environments) and select products based on their primary feelings. Furthermore, unfamiliar characters may become more familiar over time (e.g., *Tony the Tiger* from *Kellogg's Frosties*) and trigger elaborate affective responses similar to familiar media characters. This would increase the competitive strength of unfamiliar characters in other food choice environments.

We offer three suggestions for future research. First, the present study underlines the importance of studying brand characters as a heterogeneous and not a homogeneous phenomenon. In order to fully understand the effectiveness of brand characters, further research should continue to explore, or at least take into account, other types of character–product congruence, such as shape. Second, to ensure that our preliminary findings are not limited to the specific product used in this study, future research should explore whether character–product congruence is also effective for other healthy food products. And third, although affective responses are typically a good predictor of product preference and actual consumption (Calvert, 1999; Institute of Medicine, 2006), further research should incorporate field studies in which the effectiveness of brand characters on children's actual behavior is measured. Such research could also investigate how the positive role of characters may be enforced within the family and how parents and characters can work together to promote healthy diets among children.

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