Cognitively Uncontrolled Spillover Effects of Brand-Name Prizes in Advertisements

by Heribert Gierl and Julia Koncz

In this study we discuss and analyse spillover effects from a brand-name prize to an advertised brand that are combined in a print advertisement. We use the term brand-name prize to emphasise that the brand of the prize differs from the brand of the advertised product. We concentrate on the case that consumers do not scrutinise the reason why an advertiser uses brand-name prizes in advertisements as a means to influence the cognitions about the advertised brand. We refer to theoretical approaches to derive conditions under which cognitively uncontrolled processes either lead to an assimilation, contrast, or set-size effect. We focus on quality beliefs about the advertised brand and assume that the prominence of the picture of the brand-name prize, the congruity of quality beliefs between the advertised brand and the brand-name prize, and the strength of brand beliefs are critical variables which contribute to predict the kind and strength of the spillover effect. Using a between-subjects design we found support for our hypotheses. Finally we derive recommendations for advertisers who intend to use brand-name prizes in advertising campaigns.

Keywords
Spillover, brand-name prizes, anchoring & adjustment, information integration theory, cognitive consistency theories, adaptation level theory

1. Introduction

1.1. Strategies to Improve Perceived Brand Quality

Brand values result from consumers’ connotations that are evoked by brand names (Aaker/Keller 1990, p. 28). Thus brands are one of the most valuable assets consumer good manufactures possess, as they can use them to signal the value of their products to the consumers (Aaker/Keller 1990; Broniarzyk/Alba 1994; Dacin/Smith 1994, p. 229; Morrin 1999). Among all possible brand beliefs, the perceived product quality is especially relevant as it often is the main reason for consumers to buy a brand (Aaker 1990, p. 48; Chandon/Wansink/Laurent 2000, p. 66; Farquhar/Herr 1993, p. 263; Janiszewski/van Osselaer 2000; Kirmani/Zeithaml 1993; Sattler/Völckner 2003, p. 1081). Therefore activities which improve perceived quality of a brand are of great importance to marketing managers (Boulding/Lee/Staelin 1994). Authors often consider advertising activities as well as promotions as means to influence perceived product quality.

Dean (1999) gives an overview of advertising strategies which are commonly used to improve perceived brand quality. These strategies consist in recommendations of a brand through a celebrity endorser, the accentuation of sponsorship activities, and the information that a brand is rather popular. Additionally, joint advertising campaigns or joint presentations of brands with other attractive entities (i.e., placement of products in movies or computer games) have been an emerging advertising strategy for brand managers to improve brand beliefs (Law/Braun 2000; Levin/Levin 2000; Rao/Ruekert 1994; Rao/Qu/Ruekert 1999; Simonin/Ruth 1998; Washburn/Till/Pripluck 2004, p. 490). Promotional activities are means to increase sales in a retail setting (Tellis 1998). Non-price promotional instruments can be used to achieve this objective via improving brand quality beliefs. Examples are bundles of products combining different brands (Gaeth et al. 1990; Yadav 1994) and free premiums of other attractive brands or entities (e.g., pictures of prominent football players and the like), if a purchase is made.
(Low/Lichtenstein 1993; Shimp/Dyer/Divita 1976). All these strategies aim at benefiting from the connotations of an attractive entity (e.g., celebrity endorser, event, movie, another brand) which transfers to the advertised or promoted brand’s beliefs. Authors generally assume that the activities described above evoke spillover effects, i.e. the connotations of the advertised or promoted brand benefit from combination with another attractive entity. For example, Simontin/Rath (1998) successfully demonstrated spillover effects among quality beliefs about brands combined in advertising alliances. Gwinner/Eaton (1999) showed positive spillover effects in the field of sponsoring. Priemer (2000) identified positive spillover effects among products in a bundle.

1.2. Using Brand-Name Prizes to Influence Perceived Brand Quality

Another instrument which is frequently used by brand managers to benefit from spillover effects of another attractive entity is the use of brand-name prizes in advertising or in non-price promotional campaigns (Brown/Kuldenberg/Brown 1992; Gedenk 2002, p. 315; Gedenk/Neslin 2000, p. 370; Grossman 1997; Palupski/Bohrmann 1994). In this case the advertised or promoted brand is combined with another more or less attractive brand which is used as a prize. In an advertising campaign which announces a brand-name prize, the ad presents both stimuli jointly to the consumer.

We only consider the situation in which there are no costs for the consumer to compete for the prize. The online encyclopedia Wikipedia (http://en.wikipedia.org/wiki/Sweepstakes) defines the term sweepstakes as where “the prize is financed through tickets sold”. However, it is noted that in the U.S. “the word has become associated with promotions where prizes are given away for free. Sweepstakes specifically do not require a purchase to enter. Winners should also not be required to pay a fee of any type to receive their prize”. Feinman/Blashek/McCabe (1986) refer to sweepstakes as consumers’ opportunities to win a prize by completing an entry form (i.e. his/her address). The winner results from a random drawing. If a person has to fulfill a certain task to be permitted to be a possible winner (e.g., inserting letters in a solution word), the authors term this form a contest. In contrast to the definition of Feinman/Blashek/McCabe, Shimp’s (1998, p. 585) definition is that participating in a contest may require submitting a proof of purchase. Sometimes in ads scratch cards are affixed and the consumer can win the prize shown if he finds the winning symbol on this card after scratching the fields. Feinman/Blashek/McCabe (1986) refer to this type of activity as a game. Admittedly further ways of integrating brand-name prizes in an advertisement are conceivable (Schultz/Robinson/Peterson 1998, p. 121 ff.). In this article we do not concentrate on discussing the effects of different forms of integrating brand-name prizes in advertising or promotional campaigns. Furthermore, we do not expect different effects of brand-name prizes if they are either included in advertisements like print ads or TV commercials or in materials distributed at the point of purchase to influence quality beliefs. Thus we use the term “ad” to cover all these possible media. However, we also do not consider raffles, which describe a competition in which people have to buy something.

Stotmeister (1988, p. 18) noted that using brand-name prizes is popular among German advertisers if the value of the own product is too low to use it as an attractive prize. He stated that suppliers of consumer goods often offer very expensive brand-name prizes to attract customers (e.g., expensive cars or holiday trips). Furthermore, offering brand-name prizes often can be observed if service brands are advertised (Stotmeister 1988, p. 22). Even currently in Germany brand-name prizes are included in many consumer good advertisements. Financed at the point of purchase to influence quality beliefs. Thus we use the term “ad” to cover all these possible media. However, we also do not consider raffles, which describe a competition in which people have to buy something.

1.3. Contribution to Research on Spillover Effects within Brand Alliances

This article contributes to research on the field of brand alliances. Thus the question arises whether already existing research findings about spillover effects resulting from brand alliances can be transferred to forecast spillover effects if brand-name prizes are used. Brand alliances are defined as “all circumstances in which two or more brand names are presented jointly to the consumer” (Rao/Qu/Ruckert 1999, p. 259). As research on brand alliances covers a very wide range of constellations, we doubt that an integrative theory exists which can be applied to the problem we discuss. In the following we give arguments that could support our point of view.

There are basically different types of brand alliances (Baumgarth 2001). An important distinction refers to integrative and non-integrative alliances (Decker/Schliffter 2001; Samu/Krishnan/Smith 1999, p. 57). Examples for integrative types are ingredient branding (e.g., “intel inside” in Fujitsu Siemens computers), composite branding (e.g., Philips razors with Nivea shaving emulsion or electric toothbrushes of Braun Oral B), and the usage of fictional characters in other brands (e.g., Kellogg’s cereals shaped as Mickey Mouse or Faber Castell pens in Porsche design). In these constellations, consumers evaluate a single product whose quality results from...
from the components’ quality. Increasing one component’s quality leads to an improvement of the product’s overall quality which is obvious to the consumer. McCarthy/Norris (1999) show that integrating a high-quality ingredient results in an improvement of the quality perceptions of a moderate-quality host brand. Thus, the difference in quality perceptions is reduced. Park/Youl Jun/Shocker (1996) demonstrate that the quality beliefs about a co-brand result from the components’ quality beliefs. They asked respondents to imagine a fictitious new cake mix brand “Slim Fast by Godiva” (co-brand) combining the well-known brands Slim Fast (diet food) and Godiva (chocolate). The quality of the co-brand was rated as least as high as its best component. Furthermore, the quality beliefs about the comparatively poor brand converged to the superior brand’s quality beliefs thus giving support for an assimilation effect (i.e., the difference in quality perceptions is reduced by supplying a co-brand).

Examples for non-integrative alliances are horizontal joint advertising (e.g., ads presenting frozen food from Iglo and dishes by Thomas jointly), usage of reference customers (e.g., Hewlett Packard refers to Dreamworks, Toys”R”Us, and Fender as users of its products in advertisements), and joint promotions (e.g., vouchers worth € 25 for gas filling at ARAL for opening an account by ING DIBA bank), partners in loyalty programs (e.g., after having obtained a fixed amount of loyalty points consumers can exchange them for another product), and sub brands (e.g., Mini from BMW). We assume that customers exposed to these types of brand alliances are not able to conclude from the quality of one product to the quality of the other product directly, as it is evident to them that there is no direct relationship between the combined brands. This assumption is supported by a study of Simonin/Ruth (1998). The authors combined the well-known brands Northwestern Airlines and Visa Card in a single ad and were only able to show that the attitude toward the brands is affected indirectly by the attitude toward the brand alliance. Simonin/Ruth found support for the assumption that the attractiveness of the brands benefits from positive attitudes toward the joint advertisement which in turn are affected by the brands’ complementarity.

Thus it is evident that integrative and non-integrative brand alliances may cause different mental processes. Subsequently we can ask whether findings about spill-over effects caused by various non-integrative forms of brand alliances can be generalised to predict spillover effects of using brand-name prizes in ads. A specific characteristic of using brand-name prizes compared to other non-integrative alliances consists in the fact that consumers may assume that the supplier of the brand-name prize does not necessarily have to agree to the usage of his product to be used as a prize. Thus consumers may believe that companies conducting the contest can arbitrarily choose brand-name prizes to maximise advertising effectiveness. Furthermore, consumers may have learned that a wide variety of companies use similar brand-name prizes like expensive cars, holiday trips, and jewellery even if the natural fit between the advertised product and the brand-name prize is low. As the “brand alliance” in the case of using a brand-name prize is weak, we conclude that primarily cognitively uncontrolled spillover effects exist if any spillover occurs. Our assumption that different brand alliances may evoke different mental processes is also supported by the observation that more or less extensive research exists on spill-over effects of different types of brand alliances (e.g. ingredient branding: Desai/Keller 2002; McCarthy/Norris 1999; Venkatesh/Mahajan 1997; composite branding: Baumgarth 2003; Levin/Davis/Levin 1996; Park/Youl Jun/Shocker 1996; horizontal joint advertising: Simonin/Ruth 1998; product bundling: Gaeth et al. 1990; Russell et al. 1997, p. 299 f.; Yadav 1994).

These arguments give reasons to analyse spillover effects between an advertised brand and a brand-name prize in detail. Results can be useful to derive recommendations on developing ads or promotional material that help to improve the advertised brand’s connotations (Gardener/Trivedi 1998, p. 67; Lemon/Nowlis 2002, p. 171).

In this article we aim at identifying moderating variables resulting in positive spillover effects of brand-name prizes. We consider the prominence of the picture of the brand-name prize compared to the advertised brand’s picture, strength of brand beliefs, and belief congruity. Starting with presenting explanations of spillover effects, we derive hypotheses which are tested in experiments.

2. Theoretical Background

Spillover effects from a brand-name prize to the beliefs about the advertised brand may result from mental processes which will be explained in this section. We only consider cognitively uncontrolled spillover processes, as we assume that these processes reflect best the influence of brand-name prize connotations on beliefs about the advertised brand. We refer to uncontrolled spillover processes if the recipients do not spend cognitive effort to scrutinise the advertiser’s motivation to offer a certain brand-name prize. We assume that consumers do not feel manipulated due to the familiarity of brand-name prizes in advertising campaigns thus spending no cognitive effort to control the influence of brand-name prize connotations on quality beliefs about the advertised brand. We refer to uncontrolled spillover processes if the recipients do not spend cognitive effort to scrutinise the advertiser’s motivation to offer a certain brand-name prize. We assume that consumers do not feel manipulated due to the familiarity of brand-name prizes in advertising campaigns thus spending no cognitive effort to control the influence of brand-name prize connotations on quality beliefs about the advertised brand.

2.1. One-sided Spillover Effect

In this section we discuss one-sided spillover effects. We refer to effects as being one-sided if only the beliefs about the advertised brand are affected by the beliefs about the brand-name prize whereas the connotations of
the brand-name prize do not change. This case is likely to occur if recipients notice the brand-name prize before evaluating the advertised brand (Bargh/Chen/Burrows 1996, p. 230; Chartrand/Bargh 1996; Herr 1986, p. 1107). If an ad shows pictures of both products and if a person perceives the brand-name prize to be the more prominent stimulus, this situation might exist.

The anchoring & adjustment heuristic can be applied to forecast spillover effects in this constellation. This heuristic can be described as follows: If a given anchor stimulus is perceived and encoded prior to a focal stimulus, the perceived value of the focal stimulus becomes more similar to the anchor value compared to a separate presentation of both stimuli. Thus this heuristic predicts an assimilation of a focal stimulus to the value of the anchor (Jacowitz/Kahneman 1995; Mussweiler/Förster/Strack 1997, p. 589; Wilson/Houston/Etling 1996). If the connotations of the brand-name prize are considered as an anchor, the advertised brand beliefs can converge to that anchor. A first explanation of this effect is “insufficient adjustment”. It is assumed that recipients have beliefs about an interval which includes the conceivable values of the focal stimulus. In the next step they automatically regard the anchor value as a first approximation to the value of the focal stimulus. If the anchor value is outside this interval, the recipients mentally approach the interval of conceivable values from the direction of the anchor value. If the anchor value exceeds the maximum (minimum) interval value, the maximum (minimum) value is considered to be the true focal value. This process results in an assimilation of the focal stimulus to the anchor stimulus. The evaluation of the anchor stimulus in contrast does not change due to the combination with the focal stimulus (Jacowitz/Kahneman 1995; Mussweiler/Förster/Strack 1997; Wansink/Kent/Hoch 1998). A second explanation for an adjustment effect is mental hypothesis-testing. This process can be described as follows: Imagine people receive information about an anchor stimulus first. At the moment in which the recipients additionally receive information about a focal stimulus the anchor information is still accessible in their mind (Higgins/King 1981, p. 71; Mussweiler 2003, p. 475). It is assumed that people automatically test the hypothesis whether the focal stimulus has the same properties as the anchor stimulus (they mentally conduct “hypothesis-testing”). As persons tend to prefer confirmation and to dislike disconfirmation the anchor value fosters assimilation (Mussweiler/Förster/Strack 1997, p. 594; Mussweiler/Strack 1999, p. 138 f.). Empirical results show that the adjustment effect described above even exists if the anchor has no logical relationship to the focal stimulus. For instance, Wilson/Houston/Etling (1996, p. 392) demonstrate that respondents are even influenced in their estimation of physicians in their city if they are previously asked to mention their identity number, which was randomly assessed to them as test subjects.

The anchoring & adjustment heuristic implies that only assimilation effects can occur if a brand-name prize is encoded and judged prior to the evaluation of an advertised brand. The reverse effect, i.e. contrast, is not expected. We refer to spillover effects as contrast effects if the beliefs about the advertised brand become more dissimilar to the beliefs about the brand-name prize if both brands are combined.

It should be noted that, as discussed in the literature, mental processes leading to assimilation and to contrast can co-occur (Wänke/Bless/Igou 2001, p. 15). Note that anchoring & adjustment only predicts assimilation. As no tendencies to contrast the quality beliefs about the advertised brand and the brand-name prize are expected, we assume:

H1: If the picture of the brand-name prize is more prominent in the advertisement than the advertised brand’s picture, an assimilation effect of the quality beliefs is expected to be observed.

We are not aware of any authors investigating spillover effects in other types of brand alliances who have analysed the moderating role of “prominence” of the combined brands.

### 2.2. Two-sided Spillover Effects With Opposite Signs

In the following two sections we discuss two-sided spillover effects which are not cognitively controlled by the recipients of the ad. Effects are called two-sided if the beliefs about the advertised brand as well as the beliefs about the brand-name prize are influenced if the brands are presented jointly in an ad. We start with discussing two-sided spillover effects with opposite signs (Simonini/Ruth 1998, p. 31). This case could be relevant if the pictures of both brands are given equal weight in the ad. Several theoretical approaches can be applied to forecast spillover effects in this constellation.

First, we refer to information integration theory as a basis for explaining assimilation effects. Anderson (1971, 1981) assumes that jointly perceived stimuli are evaluated simultaneously. Therefore, the beliefs about a stimulus become a part of the beliefs about the other stimulus and vice versa. Anderson denotes the result of

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**Table 1: Approaches to explain cognitively uncontrolled spillover effects**

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<th>One-sided transfer</th>
<th>Two-sided transfer with opposite signs</th>
<th>Set-size effect</th>
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<tr>
<td><strong>Anchoring &amp; adjustment heuristic</strong></td>
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<td><strong>Information integration theory</strong></td>
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<td><strong>Cognitive consistency theories</strong></td>
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this mental process as averaging, which describes the same effect as assimilation. Huber/McCann (1982), Simonin/Ruth (1998), and Venkataramani Johar/Iedidi/Jacoby (1997) give examples of marketing applications of this theory.

Second, cognitive consistency theories are also applicable to this constellation. They are based on the assumption that people prefer a consistent relationship between stimuli which are linked. If these stimuli elicit a contradictory impression, people are motivated to prevent themselves from an unpleasant affective state by changing the evaluation of the stimuli (Insko et al. 1975, p. 170). Thus theories like balance theory (Heider 1958), dissonance theory (Festing 1957), and congruity theory (Osgood/Tannenbaum 1955) predict automatically occurring two-sided assimilation effects with opposite signs.

Third, we can apply adaptation level theory (Helson 1964) and related theories as individual perspective theory (Ostrom/Uphshaw 1968; Uphshaw 1962) to our issue. These theories are often used to analyse conditions under which contrast effects are likely to occur. On the basis of these theories it is argued that any focal stimulus is rated against an internal reference point (Herr/Fazio 1983; Musweiler 2003, p. 474; Sheriff/Holland 1961; Tourangeau/Rasinski 1988, p. 300). We first use a simple example to illustrate the consequences of this assumption. Assume consumers intend to evaluate the price of a middle-class car named A, and objectively this price is neither high nor low. To proceed they need a reference point which reflects the price middle-class cars usually have. Furthermore, assume that the consumers get in contact with a very expensive car named B prior to the evaluation of A. It is expected that this price information leads to an increased internal reference point (i.e., reference price). Additionally the price of A will influence the internal reference point. In this constellation a moderate stimulus (price of A) is combined with an extreme stimulus (price of B) which causes a remarkable shift of the reference point towards the extreme stimulus. Therefore, A will be judged as having a comparatively low price (Bless/Schwarz 1998, p. 159 f.; Herr 1989, p. 68; Schwarz/Bless 1992a). Similar examples are given by Levin (2002), Meyers-Levy/Steinthal (1993), and Stapel/Koomen/Neulтельные (1998). This theory can be transferred to the question of how consumers evaluate the quality of the advertised brand and the quality of the brand-name prize. Assume that in an advertisement for an ordinary TV set, an exclusive cruise to the Caribbean Sea is presented as a prize. The latter cue might increase the internal reference point consumers attribute to holiday trips, because they became aware of a very tremendous option. Referring to this increased internal reference point, the beliefs about the TV set deteriorate. Analogously, noticing the ordinary TV set might reduce the internal reference point consumers attribute to TV sets because this product is integrated in the judgement about typical TV sets. Referring to this reduced internal reference point, the perceptions of the cruise to the Caribbean Sea presumably will improve.

It is likely that the described mental processes leading to assimilation and to contrast co-occur. The assimilation processes described in information integration theory and in congruency theories do not imply that changes of internal reference points do not exist. Thus in this constellation observations of assimilation or contrast are only the net effect of both processes (Wänke/Bless/Igou 2001, p. 15). These considerations give reason to the argument that the brand-name prize beliefs must differ considerably from the advertised brand beliefs to produce an overall contrast effect. Thus we derive:

H2a: If equally prominent pictures are used to show the advertised brand as well as the brand-name prize and if the quality beliefs about the advertised brand and the quality beliefs about the brand-name prize are moderately congruent, an assimilation effect can be observed.

H2b: If equally prominent pictures are used to show the advertised brand as well as the brand-name prize and if the quality beliefs about the advertised brand and the quality beliefs about the brand-name prize are very incongruent, a contrast effect can be observed.

Furthermore, authors dealing with cognitive consistency theories assume that people experiencing divergent stimuli which cause unpleasant affective states are willing to change beliefs about these stimuli. It is likely that weak beliefs are adjusted to achieve a balanced mental state (Abelson 1959; Cartwright/Harary 1956, p. 292; Dean 2002, p. 79; Herrner 2001, p. 255 ff.; Zajonc 1960, p. 286). Transferred to our issue we expect:

H2c: The assimilation effect postulated in hypothesis H2a is comparatively strong if the quality beliefs about the advertised brand are weaker than the brand-name prize quality beliefs.

To our best knowledge the moderating role of brand belief congruity on spillover effects has not been tested yet in other types of “brand alliances”. However, there are some studies about the effect of brand familiarity. Vaidyanathan/Agarwal (2000) and Venkatesh/Mahajan (1997) tested the moderating effect of host brand familiarity on spillover effects of branded ingredients, and Levin/Davis/Levin (1996) proved the moderating effect of the familiarity of the brands which were used to create a new co-brand. Note, that they combined a fictitious brand with a well-known brand and found partial support for the assumption that spillover effects depend on the combined brands’ familiarity. However, we combine two well-known brands which differ in the degree of strength of beliefs.

2.3. Set-size Effect

Besides assimilation and contrast a third type of spillover effect which does not require cognitive effort has been proposed. Anderson (1971, p. 181) assumes the existence of set-size effects if a set of entities with the same or sim-
ilar extreme valence is combined. A set-size effect refers to the fact that all combined stimuli improve or deteriorate if either very attractive or very unattractive stimuli are presented jointly. The characteristic element of a set-size effect is that there is a shift of valence of all combined stimuli in the same direction. In our application, set-size effects are expected if the advertised brand as well as the brand-name prize is perceived to have presumably either a very low quality or an extremely high quality.

Following information integration theory, the occurrence of a set-size effect is expected for the combination of extreme stimuli. Anderson (1971, p. 181) postulates that “adding information of the same value typically makes the response more extreme.” Grunert (1990, p. 10) argues that the combination of two consistently rated positive stimuli elicits a positive affective state which is transferred to the stimuli. As a consequence both stimuli appear even more attractive, supporting Anderson’s assumption. This assumption also holds in the case of combining stimuli with a very negative valence. By combining very unattractive stimuli the beliefs about these stimuli get even worse. An opposite position is held by Mandler (1982, p. 22) who expects no spillover effects if extreme stimuli are combined. To our knowledge set-size effects among stimuli have rarely been a subject of research until now. Thus we transfer the arguments of Anderson and Grunert to our case concluding:

H3a: Using an attractive brand-name prize improves the quality beliefs about an advertised brand which already elicits very positive quality connotations. Using an unattractive brand-name prize deteriorates the quality beliefs about an advertised brand which already elicits very negative connotations.

Moreover, some authors assume that people react more strongly to the presentation of negative stimuli than to the presentation of positive stimuli. This effect is known as a “negativity bias” (Fiske 1980; Ito et al. 1998). Thus we assume:

H3b: The set-size effect is comparatively stronger in the case of combining two extremely negative stimuli than in the case of combining two extremely positive stimuli.

In Figure 1 we summarise our assumptions about spillover effects of quality beliefs about an advertised brand and a brand-name prize in the case that customers do not spend cognitive effort to understand the advertiser’s reason for using a certain brand-name prize.

3. Empirical Investigation

3.1. Identifying Brands With Different Quality Connotations

In the first step we conducted a first pre-test to identify well-known brands in several product categories which differ clearly in congruence and strength of quality perceptions (Nowlis/Simonson 2000).

We did not have prior expectations of which numerical differences of brand beliefs are either very incongruent or moderately incongruent resulting either in contrast or assimilation. This problem is common to all studies which aim at identifying assimilation versus contrast. The limit separating high and moderate incongruity cannot be defined exogenously. Authors use a broad range of incongruity relying on the assumption that this range covers this limit (e.g., Bless/Schwarz 1998; Herr 1986; Herr/Sherman/Fazio 1983; Schwarz/Bless 1992b; Sherif/Hovland 1961; Stapel/Koomen/Velthuijsen 1998; Wänke/Bless/Igou 2001. Higgins 1996, p. 138 ff. gives an overview of studies on context effects). We adopt this procedure. Thus we attempted to select brands with comparatively different brand quality connotations within some product categories. We assume that the resulting brand combinations will cover a range from very incongruent to rather congruent quality connotations. Combining such brands we expect to observe assimilation, contrast, or set-size effects if any spillover effects exist.

Generally, beliefs can be described not only as being positive or negative but also as being strong or weak (Krosnick et al. 1993, p. 1132; Lee 2000, p. 30 f.). The literature presents some concepts to measure attitude strength (Berger/Mitchell 1989; Krosnick et al. 1993). Among several dimensions which the authors list to measure these concepts, the notion of certainty seems to describe best the fact that beliefs can be strong or weak. Krosnick et al. (1993, p. 1134) state that several researchers have utilized the concept of certainty to measure attitude strength. They define attitude certainty as the “degree to which an individual is confident that his or her attitude toward an object is correct” (p. 1132). They show that certainty correlates with knowledge (amount of information about an object) and direct experience with an object (p. 1135). We assume that asking the question about brand familiarity represents the amount of knowledge and direct experience. A person missing knowledge as well as direct experience would not claim to be familiar with a brand.

In the pre-test 86 participants (non-student sample) were asked to rate the quality of brands and familiarity with brands only by presenting lists of brand names to them. The data collection took part in Germany in 2004. We used the item “From my point of view the products of the brand have 1=very low quality … 7=very high quality” to enable the participants to express their quality beliefs. The statements “I am familiar/not at all familiar with products/services from …” (7-point scale) aimed at measuring strength of beliefs. On the basis of these findings we selected three brands in four product categories respectively. The results are shown in Table 2. An ANOVA gave evidence that the chosen brands are associated with significantly different quality beliefs. We also successfully applied Scheffé tests to find support for pair-
**Case 1:** The picture of the brand-name prize is more prominent than the picture of the advertised brand.

```
B_{Prize}  B_{Ad}  B_{Prize}  B_{Ad}

\{\text{one-sided assimilation (H1)}\}
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**Case 2:** The picture of the brand-name prize and the picture of the advertised brand are equally prominent.

Advertised brand beliefs are stronger than brand-name prize beliefs

Advertised brand beliefs are weaker than brand-name prize beliefs

**Non-extreme, moderately dissimilar beliefs about both brands:**

```
B_{Ad}  B_{Prize}  B_{Ad}  B_{Prize}

\{\text{two-sided assimilation}\}
```

- Shift of $B_{Ad}$ ($H2a$)
- Strong shift of $B_{Ad}$ ($H2c$)

**Non-extreme, strongly dissimilar beliefs about both brands:**

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B_{Ad}  B_{Prize}  B_{Ad}  B_{Prize}

\{\text{two-sided contrast (H2b)}\}
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**Case 3:** The picture of the brand-name prize and the picture of the advertised brand are equally prominent and both stimuli are primarily associated with the same extreme quality beliefs.

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B_{Ad}  B_{Prize}  B_{Ad}  B_{Prize}

\{\text{set-size effect}\}
```

- Positive shift of $B_{Ad}$ ($H3a$)
- Strong negative shift of $B_{Ad}$ ($H3a & H3b$)

**Notes.**

$B_{Ad}$: quality beliefs about the advertised brand.

$B_{Prize}$: quality beliefs about the brand-name prize.

Scales ranging from negative beliefs (left scale limit) to positive beliefs (right scale limit).

We do not analyse spillover effects on $B_{Prize}$ in the subsequently presented investigation.

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**3.2. Test Stimuli**

A between-subjects design was applied to test our hypotheses. Thus we had to develop print ads containing brand-name prizes and print ads without brand-name prizes. In the following sections we describe the procedure used to develop the test stimuli. We did not combine unusual product categories in the ads including a brand-name prize. For example, using alcoholic beverages as a prize in an advertisement for toys would be very strange.
We took into consideration that the number of prizes in the ads containing brand-name prizes should be credible. All test ads were coloured and DIN A4 sized.

3.2.1. Designing Ads With Eye-catching Brand-Name Prizes

Hypothesis H1 is based on the assumption that consumers view ads containing a brand-name prize but are not motivated to scrutinise the reason why the advertiser chooses that brand-name prize. Furthermore, we assume that the brand-name prize gains the attention before the recipients recognise the advertised brand. We expected that the quality beliefs about the brand-name prize serve as an anchor to which the advertised brand’s beliefs are adjusted.

Thus we had to select a combination of two product categories. One of them was intended to be easily illustrated by attention-getting pictures and the other one was intended to be illustrated by comparatively less attention-getting pictures. We used combinations of TV sets and travel companies as stimuli. An example of our ad implementations is shown in Figure 2. In this ad TV sets of Sony are advertised and holidays in Puerto Rico offered by TUI are the prize. Additional advertisements were designed for the remaining combinations of advertised TV set brands (Goldstar, Sony, and Philips) and prizes (discount, Alltours, and TUI) listed in Table 2 which results in nine ads. In all ads which combine TV sets as advertised brands and holidays organised by travel companies as brand-name prizes we used the same verbal and pictorial elements. We only varied the brand names, brand logos, labels of the model, the brand name on the TV set, and the Internet address. Using different verbal and pictorial elements in the combinations would have led to biased findings as further potential manipulation exists.

We were able to successfully demonstrate with a small student sample (N = 30) that the picture illustrating the prize (woman with umbrella at beach) was perceived prior to the picture of the advertised TV set. We used the ad illustrated in Figure 2 to analyse whether respondents recognise the brand name of the travel company prior to the brand name of the advertised TV set. In order to veil the pre-test’s purpose we chose seven ads including the relevant one. Each ad was presented for one second using a Power Point presentation of the test stimuli (relevant ad, filler ads). After having seen each of the ads the respondents were asked to indicate details. For the shown ad, the participants mainly mentioned details
about the travel company TUI. However, the critical question is whether the brand name TUI is mentioned prior to the brand-name Sony or prior to other details about the TV set. Data from 26 respondents supported this assumption leading to the conclusion that the ad design is in the domain of stimuli for which anchoring & adjustment can be predicted. The reasons for this high percentage may be seen in the comparably high proportion of a picture of the prize as well as in the fact that the textual information about the prize was printed in red letters and the picture of the woman at the beach consisted of eye-catching colours whereas the picture of the TV set was mainly in grey colour.

3.2.2. Designing Ads with Equally Prominent Pictures

In the hypotheses \( H_2 \) and \( H_3 \) we postulate that beliefs of consumers who do not spend cognitive effort to understand the reason why the advertiser uses a particular brand-name prize are influenced even if the advertised brand and the brand-name prize are equally prominent. We further expect that the strength of spillover effects depends on whether the advertised brand or the brand-name prize is associated with comparatively strong quality beliefs.

Assuming that customers are more familiar with car brands than with car tire brands, we combined car brands and car tire brands in ads to analyse the moderating role of strength of beliefs. Each of the selected brands was used once as the advertised brand and once as the brand-name prize. Figure 3 illustrates two ads designed to give the advertised brand the same weight as the brand-name prize. In the ad shown on the left-hand side, Mercedes-Benz A-class is used as a brand-name prize to promote Michelin car tires, and in the ad on the right hand side Pirelli car tires are used as prizes in a Mercedes-Benz A-class ad.

Similar ads were designed for the remaining combinations of car tire brands and car brands listed in Table 2. We used a \( 3 \) (Fiat, VW, Mercedes-Benz) \( \times 3 \) (Teamstar, Pirelli, Michelin) \( \times 2 \) (car advertised/car tires as prize, car tires advertised/cars as prize) design resulting in 18 advertisements. We expected these ads to cause assimilation, contrast, and set-size effects as predicted in \( H_2 \) and \( H_3 \).

Note that we did not check if the combined brands presented in the ads are illustrated by equally prominent pictures. As we do not know how simultaneous perception can be measured validly, we did not analyse the test stimuli by the same tachistoscope-like test which we used to analyse the ads containing a more prominent picture of the brand-name prize. Imagine that 50% of the respondents might mention the car brand prior to the car tire brand or prior to its details and 50% might do the other way around. We cannot logically conclude from this finding that the two brand names are perceived and evaluated simultaneously as we intended the respondents to do. The same findings would appear if 50% used the car brand and 50% used the car tire brand as the anchor.
Thus we only rely on face validity that both brands are perceived simultaneously. This is a limitation of our experiment.

3.2.3. Ads Without Brand-name Prizes

Additional respondents were presented with ads without brand-name prizes. These ads contained the same information and pictures of the ads described above displaying the relevant ad’s elements more generously. In Figure 4 we give an example of the designed ads. Note that quality perceptions of the advertised brands may differ from the first pre-test results as we did not use ads in the first pre-test.

3.3. Procedure

An empirical study was conducted to test the hypotheses. The participants saw print advertisements in which the advertised brand was either combined with one of three brand-name prizes or was shown without offering any prize. Table 3 displays the combinations examined in this analysis.

The data collection took part in 2004 in Germany. The interviewers had the possibility to gather participants among employees in different companies (N = 384). We assume that this sample is adequate to test our hypotheses. Usually literature requests that the chosen sample

![Figure 4: Fictitious ad for Michelin car tires without a brand-name prize](image)

<table>
<thead>
<tr>
<th>Advertised TV set brand:</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goldstar</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>discount</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>All-tours</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TUI</td>
<td>none</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sony</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>discount</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>All-tours</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TUI</td>
<td>none</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Philips</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>discount</td>
<td>9</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>All-tours</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TUI</td>
<td>none</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advertised travel company:</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>discount travel</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand-name prize:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>none</td>
<td>12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advertised car brand:</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fiat</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team-star</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Pirelli</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Michelin</td>
<td>none</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>VW</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team-star</td>
<td>8</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Pirelli</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Michelin</td>
<td>none</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mercedes-Benz</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team-star</td>
<td>12</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Pirelli</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Michelin</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advertised car tire brand:</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teamstar</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand-name prize (automobiles):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fiat</td>
<td>5</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>VW</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mercedes</td>
<td>none</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pirelli</td>
<td>7</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Michelin</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note:* The number denotes the experimental group which has been presented the ad.

Table 3: Experimental design
has to be within the domain of the tested theories and each sample that fulfills that requirement is applicable to hypotheses testing. Calder/Phillips/Tybout (1981, p. 201) only demand a sample “that encompasses individual differences that might influence performance of the intervention” (i.e., manipulation). Our chosen products aim at consumers who have a comparatively high buying power (e.g., premium cars). Thus, employees of companies should be influenced by the manipulation if any influencing of using brand-name prizes exists.

The demographic data of the sample is reported in Table 4.

The total sample was divided into twelve sub samples at random. Each of these sub samples contained 32 respondents supplying fully completed questionnaires. We did not find remarkable differences in the demographic data across the sub samples.

A series of nine ads was presented to each respondent containing six filler ads and three test ads as shown in Table 3. Respondents of the groups 4, 8, and 12 viewed an additional test ad and yet three other filler ads. Between the contact with two test ads, three filler ads were shown respectively. We used authentic filler ads showing brands with average quality beliefs from other product categories (e.g., sun glasses, watches) to avoid priming effects of one test ad to the other. Interviewers used a booklet showing each ad for approximately five seconds. Then the participants were instructed to rate the advertised products’ quality. The respondents had to evaluate the brands which we used to test the hypotheses as well as the filler brands. We further instructed the interviewers to distract the respondents with talk about accidental issues, e.g., purchase frequency in the product category or knowledge about new brands in that category, to reduce the respondents’ amount of cognitive resources spent on the ads. We assume that this procedure simulates a situation in which customers usually process print advertisements. To veil the intention of our experiment the filler ads did not include any prizes. Furthermore, the respondents did not have to evaluate the quality of the brand-name prizes shown in the test ads. The interviewers did not report that any respondents recognised the test ads to be fictitious.

We presented our test stimuli only once to the participants of the investigation as we assume that a single contact is sufficient to activate connotations leading to spillover effects. Thus we followed the practice of other authors (e.g., Gwinner/Eaton 1999; Simonin/Ruth 1998; Stapel/Koomen/Veltkamp 1998) who investigated spillover effects caused by other entities like sponsoring, celebrity endorsers, or line extensions. However, if the advertiser’s goal is to create stable changes of quality beliefs it might be necessary to present the combined stimuli repeatedly to the customers.

### 3.4. Measures

Each participant rated the advertised product’s quality for each brand immediately after the contact with the ad. We used three items which the respondents could agree on 7-point scales: low/high quality, unreliable/reliable, not at all/very trustworthy (Alpha = .821).

After completing the brand evaluation task, respondents were finally asked to assess their attitude toward the usage of sweepstakes in advertisements or promotions to test the homogeneity of the sub samples additionally. We asked “How often do you participate in promotional contests? (more than twice a year, twice a year, once a year, rarely)”, “Does your participation in a promotional contest depend on the offered prizes?”, and “Do ads including promotional contests attract your interest?” (7-point scales) resulting in non significant chi-square and ANOVA results (p > .15 respectively).

### 3.5. Results

First we tested hypothesis H1. We combined TV sets and travel companies in ads aiming at promoting TV sets and using holiday trips as brand-name prizes. The ads were designed in a way that the brand-name prize gained the attention of the customer prior to the advertised brand. Thus, H1 is valid if the TV set quality perceptions converge to the quality beliefs about the travel companies.

In Figure 5 we show quality ratings of the advertised brand if the advertised brand is presented separately in the ad and if this brand is presented jointly with a holiday trip as a brand-name prize. The upper line visualises mean values in the case of separate evaluation and the lower line visualises the mean value of the advertised brand’s quality beliefs if the ad includes both brands.
Hypothesis $H1$, which postulates that the beliefs about the advertised brand converge to the beliefs about the brand-name prize, is supported. In five of the nine constellations we observed significant assimilation effects ($p < .10$). Neither significant contrast nor set-size effects appeared in any constellation.

In the next step we analysed spillover effects from car tire brands to car brands. Note that we did not analyse if the quality beliefs about car tires (brand-name prize) are also influenced by the advertised car as we intended not to draw the recipients’ attention to the quality of the brand-name prize explicitly. The quality ratings are based on responses to ads displaying the advertised brand and the brand-name prize with equally prominent pictures. According to the second pre-test results, cars are associated with more stable quality beliefs than are car tires. Thus we expect strong spillover effects in the case of car tires if cars are used as brand-name prizes and comparatively weak spillover effects in the opposite constellation. $Figure 6$ shows spillover effects if cars are the advertised brands and car tires are used as brand-name prizes.

According to hypothesis $H2a$ we expect to observe assimilation of the quality beliefs about the car brands to the quality beliefs about the car tires (brand-name prize) if the brands evoke similar quality connotations. Contrarily, in line with $H2b$ we forecast a contrast between the quality beliefs if the combined brands activate very dissimilar quality beliefs.

- The most dissimilar combinations of stimuli are Mercedes-Benz and Teamstar (mean difference of quality beliefs $M = 4.01$) and Fiat and Michelin ($M = 2.83$). We can only confirm a contrast effect in the second case ($p < .05$). A possible reason for this finding could be the assumption that the quality beliefs about Mercedes-Benz are more stable than the quality beliefs about Fiat. In our first pre-test the participants indicated to be less familiar with products of Fiat than of Mercedes-Benz. Thus, in one of two tests we find support for $H2b$.

- The quality levels of Fiat and Pirelli (mean difference of quality beliefs $M = 2.43$) and the quality levels of VW and Teamstar ($M = 2.78$) are perceived as moderate dissimilar. In our investigation we obtained a significant
Using Teamstar car tires as prize in advertisements of car brands:

<table>
<thead>
<tr>
<th>Teamstar</th>
<th>Fiat</th>
<th>Teamstar</th>
<th>VW</th>
<th>Teamstar</th>
<th>Mercedes-Benz</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.66</td>
<td>3.23</td>
<td>2.66</td>
<td>5.44</td>
<td>2.66</td>
<td>6.67</td>
</tr>
</tbody>
</table>

\[ t = \text{-}1.409, p < .10 \]

Using Pirelli car tires as prize in advertisements of car brands:

<table>
<thead>
<tr>
<th>Fiat</th>
<th>Pirelli</th>
<th>VW</th>
<th>Pirelli</th>
<th>Pirelli</th>
<th>Mercedes-Benz</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.23</td>
<td>5.66</td>
<td>5.44</td>
<td>5.66</td>
<td>5.66</td>
<td>6.67</td>
</tr>
</tbody>
</table>

\[ t = \text{-}1.243, p > .10 \]

Using Michelin car tires as prize in advertisements of car brands:

<table>
<thead>
<tr>
<th>Fiat</th>
<th>Michelin</th>
<th>VW</th>
<th>Michelin</th>
<th>Michelin</th>
<th>Mercedes-Benz</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.23</td>
<td>6.06</td>
<td>5.44</td>
<td>6.06</td>
<td>6.06</td>
<td>6.67</td>
</tr>
</tbody>
</table>

\[ t = \text{-}1.791, p < .05 \]

Notes. Scales ranging from 1= negative beliefs to 7 = positive beliefs. 
\( t \)-values are used to compare quality beliefs about the advertised brand if a brand-name prize was included in the ad versus no-prize situation (one-tailed test).

Figure 6: Spillover effects in the case of approximately equally prominent pictures of the advertised brand and the brand-name prize – Using car tires as prizes in car advertisements

- assimilation effect just in the second case \( p < .01 \). As a result we find support for \( H2a \) in one of two tests.
- In the remaining brand combinations there is already a very low difference of quality beliefs. Therefore using a brand-name prize can only cause very small assimilation shifts. In one of the remaining cases a further significant assimilation effect was observed which also is in line with \( H2a \) (assimilation of Fiat towards Teamstar).

Finally, we investigated spillover effects between car tires and automobiles if the car tires are advertised and the cars serve as brand-name prizes. We only analysed changes in quality beliefs about the car tire brands. Figure 7 describes spillover effects resulting from our experiment.

- Remember that the brands with the most dissimilar quality ratings are first Teamstar and Mercedes-Benz and second Michelin and Fiat. In both cases we can observe significant contrast effects. The combination of Teamstar as advertised brand with Mercedes-Benz as a prize results in a significant deterioration of the Teamstar quality beliefs \( t = \text{-}1.483; p < .10 \). Using Fiat as a brand-name prize increases the quality rating of Michelin car tires \( t = 1.582; p < .10 \). Thus, hypothesis \( H2b \), which predicts a contrast effect, is consistent with these two tests.
- As noted above the combinations of Pirelli and Fiat as well as Teamstar and VW were associated with less dissimilar quality beliefs. In both cases we observed significant assimilation effects supporting \( H2a \). If in Teamstar advertisements VW cars are used as prizes, a substantial increase of the car tire’s quality connotations resulted \( t = 2.075, p < .05 \). If Pirelli was combined with Fiat as brand-name prize quality impression about Pirelli decreased \( t = \text{-}2.878; p < .01 \).
- Additionally we considered the five remaining constellations whose characteristic is a very low difference of quality connotations. In one case we further find a significant assimilation effect. If Michelin (car tires) includes VW as a prize the quality connotations with Michelin deteriorated \( t = 1.366, p < .10 \).

Admittedly the limit between congruent and incongruent stimuli is not clear cut. If we analyse spillover effects
Using automotives as prize in advertisements for Teamstar car tires:

<table>
<thead>
<tr>
<th>Teamstar</th>
<th>Fiat</th>
<th>Teamstar</th>
<th>VW</th>
<th>Teamstar</th>
<th>Mercedes-Benz</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.66</td>
<td>3.23</td>
<td>2.66</td>
<td>5.44</td>
<td>2.66</td>
<td>6.67</td>
</tr>
<tr>
<td>2.28</td>
<td></td>
<td>3.23</td>
<td>2.19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ t = -1.414, p > .10 \] \[ t = 2.075, p < .05 \] \[ t = -1.483, p < .10 \]

Using automotives as prize in advertisements for Pirelli car tires:

<table>
<thead>
<tr>
<th>Fiat</th>
<th>Pirelli</th>
<th>VW</th>
<th>Pirelli</th>
<th>Pirelli</th>
<th>Mercedes-Benz</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.23</td>
<td>5.66</td>
<td>5.50</td>
<td>5.66</td>
<td>5.98</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ t = -2.878, p < .01 \] \[ t = -.499, p > .10 \] \[ t = 1.213, p > .10 \]

Using automotives as prize in advertisements for Michelin car tires:

<table>
<thead>
<tr>
<th>Fiat</th>
<th>Michelin</th>
<th>VW</th>
<th>Michelin</th>
<th>Michelin</th>
<th>Mercedes-Benz</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.23</td>
<td>6.06</td>
<td>5.69</td>
<td>6.06</td>
<td>6.19</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ t = 1.582, p < .10 \] \[ t = -1.366, p < .10 \] \[ t = .468, p > .10 \]

Notes. Scales ranging from 1=negative beliefs to 7=positive beliefs.

\[ t \]-values are used to compare quality beliefs about the advertised brand if a brand-name prize was included in the ad versus no-prize situation (one-tailed test).

Figure 7: Spillover effects in the case of approximately equally prominent pictures of the advertised brand and the brand-name prize – Using cars as prizes in car tire advertisements

Mean difference of quality beliefs

<table>
<thead>
<tr>
<th>Mercedes-Benz/Teamstar</th>
<th>Fiat/Michelin</th>
<th>VW/Teamstar</th>
<th>Fiat/Pirelli</th>
<th>Mercedes-Benz/Pirelli</th>
<th>…</th>
<th>VW/Pirelli</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.01</td>
<td>2.83</td>
<td>2.78</td>
<td>2.43</td>
<td>1.01</td>
<td>0.62</td>
<td>0.61</td>
</tr>
</tbody>
</table>

contrast effects observed \[ \text{assimilation effects observed} \] \[ \text{little potential for assimilation} \]

between brands with the most dissimilar quality ratings (Teamstar/Mercedes-Benz and Michelin/Fiat) we have evidence for contrast effects in three of four tests supporting H2b. If we consider the two constellations with the next dissimilar quality ratings (Teamstar/VW and Pirelli/Fiat) we find support for H2a in three of four comparisons. It is evident that it is difficult to identify a significant assimilation effect if the quality beliefs about the combined brands are already very similar. However, among ten constellations we can observe two other significant assimilation effects. Figure 8 summarizes our main results.

Note, that the mean quality belief difference of 2.83 leading to contrast and the mean quality belief difference of 2.78 leading to assimilation are extremely similar. Thus we emphasise that these numbers should not be interpreted as an exact numerical limit but as…
a region resulting in different types of spillover effects.

After confirming assimilation and contrast effects successfully we tested hypothesis H2c. According to this hypothesis assimilation effects are expected to be stronger (weaker) if car tires (cars) are advertised brands and cars (car tires) are used as brand-name prize, as our first pre-test results imply that quality connotations about cars are more stable than quality connotations about car tires. Due to our findings presented above we used the constellations VW/Teamstar and Fiat/Pirelli to analyse whether the strength of brand beliefs influences the size of the spillover effect.

- Assimilation effects were observed if we combined Teamstar and VW. The quality rating of Teamstar improved ($M = .57$) and the quality rating of VW deteriorated significantly ($M = -.50$), but the degree of these changes does not differ significantly.

- We also noticed assimilation effects if Fiat and Pirelli were combined. If Fiat was the advertised brand the quality beliefs did not change significantly if Pirelli was included in the ad. Contrarily the quality beliefs about Pirelli deteriorated significantly if Fiat was used as brand-name prize.

Whereas H2c is not supported by the findings for the VW/Teamstar constellation we find support for this hypothesis by the results for the Fiat/Pirelli constellation. Thus, in one of two cases we can support this hypothesis.

Finally, we analysed if combinations of brands with comparatively low quality beliefs as well as combinations of excellent brands cause spillover effects. To identify combinations of brands which are suitable to detect set-size effects, it was necessary to distinguish set-size effects from assimilation or contrast effects. Two combinations of brands seem to fulfil best the requirement to detect set-size effects because the quality ratings are comparatively extreme. Therefore, these combinations were chosen to find evidence for H3a. The first case is the Fiat/Teamstar combination and the second the Mercedes-Benz/Michelin combination. Among four tests we only find one significant effect which is consistent with H3a. If Fiat is the advertised brand and Teamstar car tires are used as brand-name prize, quality beliefs about Fiat deteriorate. In the other three tests we did not find any significant spillover effect. Mercedes-Benz/Pirelli also represents a combination of brands associated with high quality perceptions. We could not find support for a set-size effect. Even if we include VW/Pirelli or VW/Michelin into the sample of brands with rather positive connotations we could not identify a set-size effect.

Thus the findings can be only interpreted as weak support of H3a. In hypothesis H3b we postulated that set-size effects based on very negatively evaluated stimuli are stronger than set-size effects based on very positively rated stimuli. We were able to find evidence for a set-size effect resulting from combining negatively assessed stimuli (Teamstar deteriorates if combined with Fiat) but not for combining positively judged stimuli which is in line with H3b. However, we are not able to compare the relative size of set-size effects if either positive or negative brands are combined.

Overall we conclude that the usage of brand-name prizes in advertisements causes significant and remarkable spillover effects. Furthermore, we have evidence that the effects depend on several aspects including the prominence of the picture of the brand-name prize in the advertisement, the degree of the brands’ congruence of quality perceptions, the extremity and the stability of quality perceptions, and the question of whether the quality connotations of the brand-name prize are superior to the connotations of the advertised brand. We did not combine all these aspects in total but we examined constellations for which we were able to predict spillover effects from theory. We showed that assimilation, contrast, and set-size effects are extensively consistent with expectations derived from theory.

### 4. Conclusions and Recommendations

Our investigation demonstrated that ads which include brand-name prizes can be beneficial to improve the advertised brand’s quality beliefs. We identified conditions under which positive spillover effects are likely to occur. According to our results we derive the following arguments for marketing managers who decide about using brand-name prizes.

Frequently, German suppliers of electronic equipment, lotteries, Internet providers, or commercial banks offer products like a Porsche Boxter or a Mercedes-Benz SLK as prizes. In these and similar cases the picture of the brand-name prize can gain the customers’ attention prior to the information about the advertised brand. We expected anchoring & adjustment effects to occur if such brand constellations exist. Thus we simulated advertisements including brand-name prizes to create anchoring & adjustment effects. If customers use the brand-name prize as the anchor to evaluate the advertised brand, the quality perceptions of the advertised brand should converge to the anchor. We successfully tested this hypothesis. Although empirical results are consistent with theoretical expectations, the results are only based on combinations of two product categories (TV set and travel company). However, we recommend advertisers to adopt this strategy if it is possible to use an eye-catching picture of a brand-name prize which has a maximum positive reputation.

In many other product categories customers expect advertisers to demonstrate their product through impressive pictures (e.g., mobile phones, shoes, clothing, and food products). Customers might be confused if the brand-name prize’s picture in the ad is the more prominent pictorial element. If the illustration of the prize dominates the advertised brand’s picture, consumers...
might perceive an attempt to manipulate their beliefs and might try to correct the perceived influence (Elliot/Devine 1994; Folkes 1988, p. 550; Martin 1986). However, the brand-name prize can be an adequate eye-catching stimulus in such advertisements too. In line with information integration theory, cognitive consistency theories, and adaptation level theory we expected simultaneously occurring assimilation and contrast tendencies. Assimilation was expected to be observed if assimilative tendencies exceed contrasting tendencies. Using advertisements including equally prominent pictures of the advertised brand and the brand-name prize, we found support for the assumption that an advertised brand’s quality connotations converge to the quality beliefs about the brand-name prize if quality perceptions do not differ strongly. Note that our findings are only based on two product categories (cars and car tires) and that we can not definitely guarantee that respondents really evaluated the combined brands simultaneously. However, we recommend using a brand-name prize with only moderately superior quality perceptions compared to the advertised brand’s beliefs in ads with equally prominent pictures of the advertised brand and the brand-name prize. Quality perceptions of the combined brands should not differ very strongly to avoid a contrast effect. Furthermore we recommend using brand-name prizes from product categories which are associated with very stable quality perceptions. Unfortunately, we were not able to demonstrate a positive set-size effect, i.e. an improvement of quality perceptions if an even excellent advertised brand is combined with an excellent brand-name prize.

In our study, the remaining constellation, i.e. combining a prominent picture of the advertised brand with an inconspicuous picture of the brand-name prize, was not included. Following the theories discussed above little spillover effects are expected to occur. In this case, it is likely that the consumer does not pay enough attention to the prize and cognitions toward the brand-name prize are not activated. However, this assumption might be analysed by further investigations.

Additional research is also needed to analyse if using a single product unit as a brand-name prize associated with high quality perceptions is superior to using more units of a brand-name prize which is associated with comparatively low quality perceptions. Furthermore, it is interesting whether using a premium product from a moderate price category (e.g., a TV set) as a brand-name prize provokes a larger spillover effect compared to the use of an ordinary product from a high price category (e.g., a car). These questions have not been investigated by empirical studies yet. Additionally, we suggest analysing whether the quality beliefs about brand-name prizes deteriorate if they are frequently used in advertisements of brands with inferior quality connotations. Managers of frequently used brand-name prizes might be aware of exploitation of the brand. Finally, we suggest to analyse if connotations different from quality connotations (e.g., youthfulness, freshness, and innovativeness) can be transferred from a brand-name prize to an advertised brand despite the fact that using any brand-name prize is very common to the customers.

References


