Brands as Product Coordinators: Matching Brands Make Joint Consumption Experiences More Enjoyable

RYAN RAHINEL
JOSEPH P. REDDEN

People often consume multiple products at the same time (e.g., chips and salsa). Four studies demonstrate that people enjoy such joint consumption experiences more when the products are merely labeled with the same brand (vs. different brands). Process evidence shows that this brand matching effect arises because matching brand labels cue consumers' belief that the two products were coordinated through joint testing and design to go uniquely well together. This shows that there is no universal answer to which brand a consumer likes the most; it depends on what other brands are consumed with it. More generally, the authors establish that a simple additive model of brand liking cannot fully capture consumption utility and that brands interact and influence enjoyment at the level of the brand combination.

A basic function of brands is to convey information to consumers. Brands can communicate a product quality level (Erdem 1998; Wernerfelt 1988), reasons to buy a firm's product (Keller 1993; Park, Jaworski, and MacInnis 1986), expertise of a firm (Aaker and Keller 1990; Broniarczyk and Alba 1994a), or a social identity (Belk 1988). Marketers go to great lengths to communicate this information because consumers rely on brands as cues to maximize utility. Imagine a typical trip to the grocery store as a consumer goes from category to category deciding which brand to buy. All else being equal (such as price), the consumer selects the brand in each category that they prefer the most. The end result is a basket of groceries filled with the best possible brands. Prior work argues for this approach to utility maximization by showing that better-liked brands indeed lead to greater enjoyment, even when brands function as mere labels.

Ryan Rahinel (rahin003@umn.edu) is a PhD student in marketing, University of Minnesota, Minneapolis, MN 55455. Joseph P. Redden (jredden@umn.edu) is assistant professor of marketing, University of Minnesota, Minneapolis, MN 55455. Correspondence: Ryan Rahinel. The authors acknowledge the helpful input of the editor, the associate editor, and reviewers. The authors also thank the attendees of presentations of this research at the University of Minnesota and Indiana University for their helpful comments.

For example, an identical orange juice tasted better when labeled as Tropicana versus Winn-Dixie (Hoegg and Alba 2007), and people enjoyed their favorite brand of beer most only when they could see the brand label (Allison and Uhl 1964). In short, consumers can maximize utility by consuming the most liked brand for each product.

In our research, we investigate how well this standard rule applies to situations in which multiple products are consumed at the same time. Although past work has largely ignored such joint consumption experiences, they are ubiquitous (e.g., pants and shirts, TVs and DVD players, chips and salsa). In cases of joint consumption, the logic for enjoying preferred brands can be easily extended. For example, a consumer who prefers the Tostitos (T) brand more than the Old Dutch (O) brand for chips as well as salsa would have a preference ordering of T-T > T-O = O-T > O-O. The notion here is that the consumer enjoys as much of the preferred brand as possible.

Contrary to this intuitive and simple additive model of brands, we propose that brands also interact and influence enjoyment at the level of the brand combination. In particular, our core proposition is that consumers enjoy products from the same brand together more than products from different brands (i.e., a brand matching effect). Thus, in our earlier example, the consumer would enjoy Old Dutch for both products more than would be expected if brands add only a fixed amount of utility to the experience. In fact, when having Old Dutch chips, there may even be a complete

preference reversal such that Old Dutch salsa is now enjoyed more than Tostitos salsa (i.e., preference ordering of T-T > O-O > T-O = O-T). Therefore, the answer to which salsa brand a consumer prefers depends on the chip brand already chosen, and vice versa. More generally, any brand preference depends on the other brands with which it is combined.

We posit that brand matching affects enjoyment because it triggers inferences that the products were designed and tested to work uniquely well together. This inference that the products were coordinated occurs even though brands may not invest in such coordination to any great extent. In this way, consumers see brands as similar to a sommelier who pairs a wine to go with a particular entrée or a fashion designer who creates separate pieces of clothing that seamlessly come together as a single outfit. The inference that a single brand has coordinated the products subsequently leads consumers to have a more enjoyable consumption experience. We test this proposition that consumers enjoy a joint experience more when the products have the same brand versus different brands.

This richer view of how brands affect consumption experiences contributes to the branding literature in several ways. First, it emphasizes the importance of brand combinations during consumption, a largely ignored area of branding research. Whereas past work has shown that a brand affects the enjoyment of a single product (e.g., Allison and Uhl 1964; Hoegg and Alba 2007), we show that the enjoyment of a brand's product also depends on the brands of other products with which it is consumed. Thus, the critical marketing question of which brand a consumer prefers may have no simple answer. Second, we establish brand matching as a way to create a boost of consumption utility at little cost. Although prior work has examined the effect of brand combinations on choices (Erdem 1998) and individual product evaluations (Park, Jun, and Shocker 1996; Shine, Park, and Wyer 2007), there is no work on whether they affect utility when the products are actually consumed. Accordingly, we focus on how brand combinations influence the enjoyment of a joint consumption experience. Third, we highlight a new role that consumers expect brands to fill—the role of product coordinators. Here, instead of a brand acting as a general signal of quality that all of its products inherit (Erdem 1998; Wernerfelt 1988), we show that a brand that offers complementary products signals that the products will be of especially high quality when consumed only with each other. Both consumers and firms should leverage this aspect of brands because it helps people extract greater utility from what they consume.

CONCEPTUAL BACKGROUND

Consumers own multiple products from the same brand for many reasons. Consumers may believe that a particular brand makes the highest-quality products and therefore buy it whenever possible. Consumers may also consistently use a particular brand to project a desired image (Belk 1988; Berger and Heath 2007), define their identity (Fournier 1998), demonstrate loyalty (Fishbach, Ratner, and Zhang 2011), or complete a collection

(Shine et al. 2007). This prior work all suggests that consumers like owning products from a single brand, but it remains silent on whether people actually enjoy consuming products from the same brand together more than products from different brands. Indeed, multiple brands could provide variety, which consumers generally prefer (Menon and Kahn 1995; Ratner, Kahn, and Kahneman 1999). We predict instead that consumers will enjoy products from the same brand (vs. different brands) more because they cue that the products were coordinated to work uniquely well together.

Product Coordination and Enjoyment

Product coordination captures the notion that a firm may design a product to work uniquely well when paired with another particular product. That is, beyond any synergies that come from consuming two complementary categories together (e.g., peanut butter and jelly), we propose that firms can create combinations that work particularly well together versus other random combinations from each category. Our notion of product coordination somewhat resembles the idea of expertise transfer from the brand extensions literature. Expertise transfer refers to the belief that a brand's expertise in a particular product category can be leveraged to design and make products in a related category (Aaker and Keller 1990; Broniarczyk and Alba 1994a). For instance, people may believe that a television brand is particularly able to extend to the DVD player category, since the expertise a brand accumulates from making televisions may be applicable to making DVD players. Expertise transfer can therefore explain why the DVD player may be of high quality, but it does not capture the notion that manufacturers may also have expertise in producing complementary products (such as the DVD player) that are a unique fit with only its own existing products (televisions). That is, even if all television manufacturers have an equal ability to transfer relevant expertise to the manufacturing of DVD players, each manufacturer may be particularly skilled at making DVD players to work especially well with their own TVs. This later type of expertise captures our notion of product coordination that operates at the level of particular brand pairings rather than the entire product category.

The inference that two products have been coordinated to work together is certainly valid in some cases. Consumers expect improved performance from product bundles that must fit together in a physical, mechanical, or electronic sense. For example, when buying industrial systems, buyers perceive bundled solutions to be safer than their unbundled separately designed counterparts (Lawless 1991; Wilson, Weiss, and John 1990). Harris and Blair (2006) similarly found that consumers purchasing stereo electronics preferred a bundled (vs. unbundled) purchase format when told that the categories sometimes experience compatibility issues. These findings suggest that consumers expect products to perform better when coordination could ensure that the products are physically or mechanically compatible. We investigate whether these inferences actually influence the consumption experience even where there is no need for mechanical compatibility (e.g., chips and salsa) and

Please use DOI when citing. Page numbers are not final.

when the consumed stimuli are in fact exactly the same across the conditions (i.e., the brand labels are all that change).

Matching Brand Labels and Enjoyment

Past research suggests that mere labels can shape the consumption experience. People liked their favorite brand of beer more only when it was labeled as their brand (Allison and Uhl 1964), disliked a beer with balsamic vinegar only when told this fact before drinking it (Lee, Frederick, and Ariely 2006), and liked the same wine more when it was labeled at a higher price (Plassman et al. 2008). Similarly, people performed worse on a task if told their energy drink was acquired at a discount versus the full price (Shiv, Carmon, and Ariely 2005) and preferred an orange juice labeled Tropicana over one labeled Winn-Dixie even though the juices were identical (Hoegg and Alba 2007). This work all shows that mere labels serve as cues of quality that influence the subsequent experience.

We posit that matching brand labels signal that two products were coordinated or "made for each other." This inference then cues that the joint experience will be of higher quality, which makes the subsequent experience more enjoyable. This leads to our core prediction of a brand matching effect: consumers enjoy a joint consumption experience more when two products have the same brand label versus different brand labels. Although the presumption of product coordination is sometimes valid (e.g., mechanical compatibility of auto parts), in other cases it is likely not true (e.g., chips and salsa). Even so, given that people tend to overgeneralize a cue (Broniarczyk and Alba 1994b; Chaiken 1980), we predict that the brand matching effect will hold across a wide range of product combinations. In addition to inferences of product coordination, brand matching may simultaneously generate mild levels of positive affect due to general preferences for perceptually matching stimuli (Koffka 1935; Mealey, Bridgstock, and Townsend 1999; Zajonc 1968). Nevertheless, we expect and provide evidence that inferences of product coordination generate enjoyment over and above any such factors. Likewise, given that the inference of product coordination does not depend on whether the products were actually coordinated by the brand, the brand matching effect should also hold even though the consumption stimuli are held constant and only the brand labels are changed.

Although our general prediction is that products with matching brand labels are enjoyed more together than those with mismatching brand labels, there are individual cases in which this may not hold. A brand may have a deep specialization in only one category or a consumer may have a nuanced preference for a particular brand in a category, either of which could overwhelm the benefits of brand matching. However, we posit that brand matching will still confer an increase in enjoyment beyond what would be predicted by considering the brands individually. Another likely exception is when the jointly consumed categories are not complementary. For example, consider listening to a record produced by Virgin Records on a Virgin America flight. Although the two products share the same parent brand and are jointly consumed, it is unlikely that Virgin would be able to design the acoustics of a record to match a particular airline route. Therefore, brand matching may not matter in this context. To control for these possibilities, and to isolate the proposed brand matching effect, our studies use complementary products labeled with brands that do not specialize in only one of the categories.

Four studies demonstrate that brand matching leads to inferences of product coordination and a more enjoyable experience. Study 1 shows that people are more likely to choose a brand that matches (vs. mismatches) the brand of another product that will be jointly consumed. Study 2 extends the effect by demonstrating that brand matching indeed increases experienced enjoyment during subsequent consumption. Study 3 provides evidence of our proposed account by showing that the effect is attenuated when products cannot reasonably be coordinated for each other. Study 4 links the benefits of product coordination directly to research and design and provides further evidence for our proposed account by explicitly manipulating product coordination to recreate the matching effect for mismatched brands. Overall, these findings move beyond an additive model of brand liking, and they demonstrate the importance of considering brand interactions during joint consumption.

STUDY 1

Our theory of product coordination states that people infer that brands coordinate their products to work uniquely well together. If true, then people choosing products for joint consumption should be inclined to choose matching brands, since they believe that such products will deliver more joint utility than products with mismatching brands. This study tests this underlying prediction of our theory by endowing people with a product and measuring the brand choice for a complementary product to be consumed with it.

This study also tests whether the motivation to have matching brands can actually reverse which of two brands is preferred. To test this, we manipulated whether the endowed product was from a favored or a nonfavored brand, and we then had participants choose between the same two brands for the complementary product. We expect that the motivation to have matching brands will significantly increase choice shares of the nonfavored brand when people are endowed with their nonfavored brand, because choosing their nonfavored brand provides an opportunity to have matching brands. Additionally, this study uses a range of product categories to test whether the effect is general in nature as our theory would suggest.

Method

This study used a 2 (endowed brand: favored or nonfavored) × 4 (product category pair: laundry detergent + fabric softener; toothpaste + toothbrush; salsa + tortilla chips; or peas + carrots) mixed design. Endowed brand was a between-subjects factor, and product category pair was a within-subjects factor. Participants first rated how much they

liked five brands in each of the four category pairs on a 100-point scale anchored by "not at all" and "very much." Based on these ratings, we selected the two brands in each category with a liking rating difference closest to five points to be the favored and nonfavored brands for that participant. This ensured that the brands differed significantly in liking, but not so much as to overwhelm a matching effect.

For each category pair, we then asked the participant to imagine that they were endowed with the first product (laundry detergent, toothpaste, salsa, or canned peas). We randomly manipulated whether this endowed product was from the favored or nonfavored brand in that category. Participants then chose between the same two brands for the second product (fabric softener, toothbrush, tortilla chips, or canned carrots), to be consumed with the first product. The presentation order of the category pairs was balanced using a Latin Square design.

We expected an overwhelming majority of participants endowed with their favored brand to choose their favored brand for the second product, since this choice is not only consistent with stated brand preferences but also with the motivation to have matching brands. However, we expected this preference for the favored brand to diminish when participants are endowed with their nonfavored brand, since the desire to have the favored brand would be offset by a desire to have matching brands.
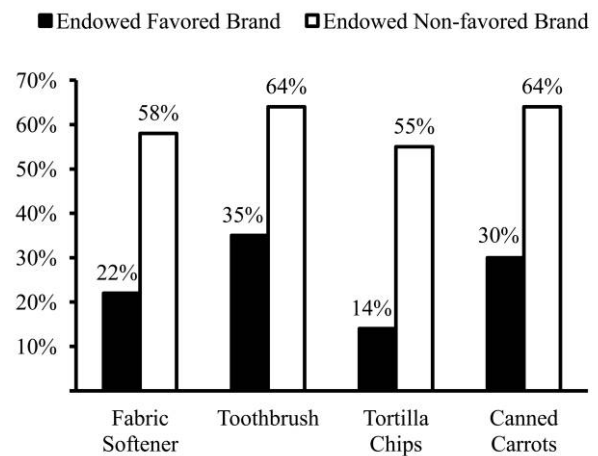
Results

One hundred and thirty members of an online panel completed the study in exchange for $.50. Using paired sample t-tests, we first confirmed that favored brands were rated significantly higher than nonfavored brands in the laundry ($M_{Favored} = 54.07$ vs. $M_{Nonfavored} = 49.79$; $t(129) = 18.24$, $p < .001$), dental ($M_{Favored} = 64.13$ vs. $M_{Nonfavored} = 59.52$; $t(129) = 18.15$, $p < .001$), chips with salsa ($M_{Favored} = 60.77$ vs. $M_{Nonfavored} = 56.31$; $t(129) = 19.54$, $p < .001$), and vegetables categories ($M_{Favored} = 48.78$ vs. $M_{Nonfavored} = 44.48$; $t(129) = 18.32$, $p < .001$). Thus, our criteria were successful in identifying more and less favored brands.

We then tested our prediction that nonfavored brands are chosen significantly more when participants are endowed with a complementary product from their nonfavored (vs. favored) brand. To test this prediction, we analyzed the choice shares of the nonfavored brand using a repeated measures logit model with endowed brand as a between-subjects factor and product category pair as a within-subjects factor. There was a significant effect of product category pair ($\chi^2(3) = 7.84$, $p < .04$) and no significant effect for the two-way interaction ($\chi^2(3) = 3.06$, $p > .38$). More importantly, there was a significant main effect of endowed brand ($\beta = -1.42$, $\chi^2(1) = 50.23$, $p < .001$). The direction of the endowed brand coefficient confirmed our prediction that people endowed with their nonfavored brand were more likely to choose their nonfavored brand for the second product, and vice versa. As shown in figure 1, this effect emerged for choice of the fabric softener ($M_{Favored} = 22\%$ vs. $M_{Nonfavored} = 58\%$; $\chi^2(1) = 17.41$, $p < .001$), toothbrush ($M_{Favored} =$

CHOICE SHARES FOR NONFAVORED BRAND IN STUDY 1

35% vs. $M_{Nonfavored} = 64\%$; $\chi^2(1) = 8.97$, $p < .01$), chips ($M_{Favored} = 14\%$ vs. $M_{Nonfavored} = 55\%$; $\chi^2(1) = 25.33$, $p < .001$), and carrots ($M_{Favored} = 30\%$ vs. $M_{Nonfavored} = 64\%$; $\chi^2(1) = 15.06$, $p < .001$). In fact, participants endowed with their nonfavored brand subsequently chose their nonfavored brand for the complement over 60% of the time, which is significantly more than the 50% that indicates equal preference (95% CI: [54%, 66%]). Overall, across every single category, participants were more likely to reverse their preference and pick a nonfavored brand for a product when already endowed with this brand for another product to be consumed with it.

Discussion

This study confirms the predicted brand matching effect. The majority of participants chose to have matching brands for products to be consumed together. Although the data do not allow us to tease apart whether the effect reflects a consideration of the benefits associated with product coordination or an aversion to the potential risks arising from noncoordinated products, the desire to have matching brands was strong enough to overwhelm preexisting brand preferences. In other words, the prospect of having matching brands was able to reverse the preference for a favored brand, and it led people to choose a nonfavored brand if it produced matching brands. This result seems to be quite general in nature as it emerged in each of four product category pairs, none of which has an absolute requirement for compatibility. We posit that these effects emerge because people spontaneously infer that a brand coordinates its products to deliver higher consumption utility with each other than with products from other brands. We next extend these findings by testing whether the effect for choices extends to the actual enjoyment of the subsequent consumption.

Please use DOI when citing. Page numbers are not final.

STUDY 2

This study has two objectives. First, we wanted to test whether brand matching results in heightened consumption enjoyment of joint consumption experiences. We accomplish this by measuring people's enjoyment of tortilla chips and salsa. Second, we wanted to ensure that the findings from the first study were not due to either objectively higher complementarity between products from the same brand or specific to the particular brands we included in the study. Therefore, in this study we hold the consumption stimuli constant and use unknown brands as mere labels. In line with our theory of a brand matching effect, we expected people to enjoy the tortilla chips and salsa more when the brand labels matched (vs. mismatched).

Method

Eighty-nine people participated in this study as part of a larger research session for \$6. Participants were told that they would be evaluating tortilla chips and salsa as part of a taste test. They were then presented with a sample of chips and salsa according to a 2 (tortilla chips brand label: Party Time brand or Festivity brand) × 2 (salsa brand label: Party Time brand or Festivity brand) between-subjects design. A pretest confirmed that these brand names had similar favorability ratings ($M_{PartyTime}$ = 4.15 vs. $M_{Festivity}$ = 4.03; $t(31)$ < 1, NS) on a 7-point scale (1 = "very unfavorable"; 7 = "very favorable"). A free recall listing also indicated no widespread preexisting associations with either brand. The labels for each product were clearly noted in the eating instructions (e.g., Party Time® brand tortilla chips). In reality, everybody received Tostitos brand tortilla chips and Tostitos brand salsa. After reading the instructions, participants were told the supposed brand names for the chip sample and salsa sample they would eat.

Participants were instructed to dip one tortilla chip in the salsa and eat it. Upon finishing the chip and salsa, participants rated the experience on 133 millimeter line scales for enjoyment (anchored by "least enjoyable experience ever" and "most enjoyable experience ever") and taste (anchored by "worst chips and salsa I've ever had" and "best chips and salsa I've ever had").
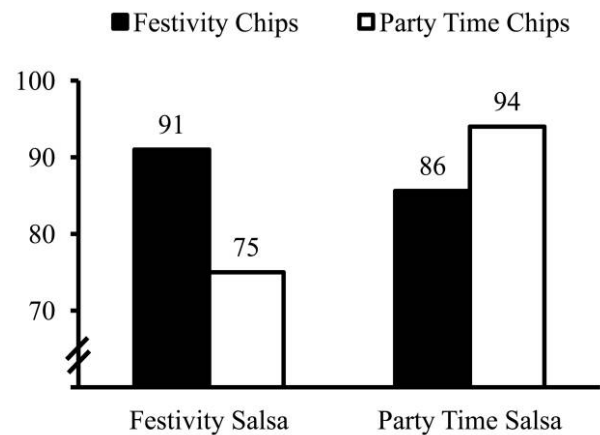
Results

The two dependent measures of taste and enjoyment were highly correlated (r = .74, $p < .001$), so we averaged them to form a single enjoyment index (α = .85). A 2 × 2 ANOVA was performed on this enjoyment index, with the brand labels for each of the two products as between-subjects factors. The analysis yielded only the predicted two-way interaction ($F(1, 85)$ = 6.81, $p < .02$), as the main effects were nonsignificant for the chip brand label ($F < 1$, NS) and the salsa brand label ($F(1, 85)$ = 2.08, $p > .15$).

To test the nature of the interaction shown in figure 2, we performed a planned contrast comparing the conditions with matching brand labels to those with mismatching brand

FIGURE 2

ENJOYMENT RATINGS BY BRAND LABEL
CONDITION IN STUDY 2

labels. We confirmed our predicted brand matching effect, as the tortilla chips and salsa with matching brand labels were enjoyed more than those with mismatching brand labels ($M_{Matching}$ = 92.62 vs. $M_{Mismatching}$ = 81.00; $t(85)$ = 2.61, $p < .02$). When having a salsa labeled as Festivity, participants preferred the Festivity chip over the Party Time chip ($M_{Festivity-Festivity}$ = 91.11 vs. $M_{PartyTime-Festivity}$ = 74.94, $t(85)$ = 2.37, $p < .03$), but tended to show the reverse pattern when the salsa was labeled as Party Time ($M_{Festivity-PartyTime}$ = 85.60 vs. $M_{PartyTime-PartyTime}$ = 94.06, $t(85)$, $p > .19$).

Discussion

These data support our hypothesis that having matching (vs. mismatching) brand labels for two products consumed together produces a better consumption experience. It is notable that a simple additive model of brand liking would not account for this as the best experience would have the more favored brand for every product. Rather, our results indicate the presence of an interaction such that the effect of a brand in one category depends on the brand in the other category. It is notable that we observed this effect even though the underlying stimuli (chips and salsa) did not change, suggesting that inferences of product coordination affect consumption enjoyment over and above any objective complementarity that may be present for products from the same brand. Moreover, this study further demonstrates the ability for a wide array of brands to capitalize on the brand matching effect, as participants were given no information about the brands of chips and salsa other than the brand name.

STUDY 3

The objective of this study is to provide evidence that an inference of product coordination underlies the brand match-

ing effect. If the enjoyment created by brand matching results from an inference that the products were coordinated to work uniquely well with each other, then the effect of brand matching should be attenuated when consumers are told that the product categories do not influence each other during the consumption experience (since this implies that the products could not be coordinated for each other). In this study, we tested this aspect of our theory by telling some participants that the two foods are sensed by different parts of the tongue so presumably one affects the other very little. We expected that preventing inferences of coordination in this way would attenuate the effect of brand matching on enjoyment.

Method

One hundred and nineteen undergraduates at the University of Minnesota participated in the study for course credit. The study was a 2 (brand matching: matching brand labels; or mismatching brand labels) × 2 (mutual product influence: control or no influence) between-subjects design. Consistent with study 2, we used tortilla chips and salsa as the consumption stimuli and Festivity and Party Time as the brands (counterbalanced across the two products). In the control condition, participants read the supposed brand names for the chip sample and salsa sample they would eat. In the no influence condition, we added a single line of text that read: "Although often consumed together, tortilla chips and salsa are sensed by different parts of the tongue and their tastes do not influence each other much." Participants were instructed to dip one tortilla chip in the salsa and eat it as part of a taste test. Upon finishing the chip and salsa, participants rated the experience on 133 millimeter line scales for enjoyment (anchored by "least enjoyable experience ever" and "most enjoyable experience ever"), and taste (anchored by "worst chips and salsa I've ever had" and "best chips and salsa I've ever had").
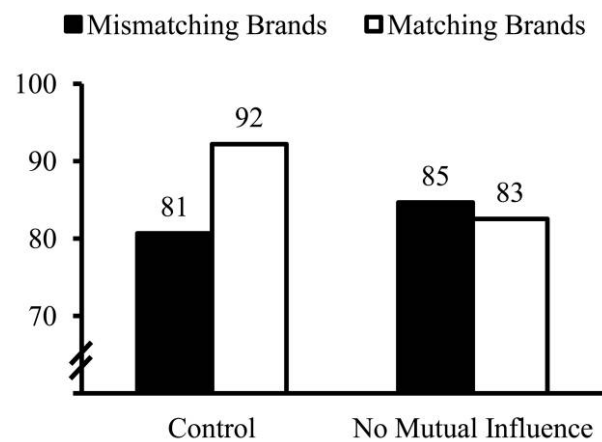
Results

The two dependent measures of taste and enjoyment were highly correlated ($r = .66$, $p < .001$), so we averaged them to form a single enjoyment index ($\alpha = .80$). A 2 × 2 ANOVA was performed on this enjoyment index, with brand matching and mutual product influence as between-subjects factors. The analysis yielded only the expected two-way interaction ($F(1, 115) = 4.84$, $p < .03$), as the main effects were nonsignificant for brand matching ($F(1, 115) = 2.29$, $p > .13$) and mutual product influence ($F < 1$, NS).

Decomposing the interaction depicted in figure 3 confirmed our predictions. In the control condition, we replicated the brand matching effect as tortilla chips and salsa with matching brands were enjoyed more than those with mismatching brands ($M_{Matching} = 92.20$ vs. $M_{Mismatching} = 80.67$; $t(115) = 2.84$, $p < .01$). However, when told that there was little interaction in the tastes of tortilla chips and salsa, brand matching had no effect on enjoyment ($M_{Matching} = 82.52$ vs. $M_{Mismatching} = 84.65$; $t(115) < 1$, NS). Additional

FIGURE 3

ENJOYMENT RATINGS BY CONDITION IN STUDY 3

evidence for the underlying role of product coordination is given by the finding that communicating the lack of a mutual influence between tortilla chips and salsa reduced the enjoyment for matching brands ($M_{Control} = 92.20$ vs. $M_{No\ Influence} = 82.52$; $t(115) = 2.26$, $p < .03$), but had no effect for mismatching brands ($M_{Control} = 80.67$ vs. $M_{No\ Influence} = 84.65$; $t(115) < 1$, NS), since people presumably did not infer that products from mismatching brands were coordinated anyway.

Discussion

This study replicates the brand matching effect and provides evidence of product coordination as an underlying mechanism. Participants enjoyed products with matching brands more than those with mismatching brands in the absence of additional information. However, this effect was attenuated when we told participants that tortilla chips and salsa are sensed by different parts of the tongue so their tastes do not influence each other much. This information presumably suggested that the products could not be coordinated to each enhance enjoyment of the other, therefore preventing any enjoyment that could have been created by brand matching. We explicitly communicated the lacking potential for coordination here, but one can imagine similar effects if advertisements highlight that complementary products are a commodity, consumer expertise corrects inferences for products truly not coordinated, or the product categories are not seen as related because they are rarely consumed in a joint fashion.

This study also helps rule out the explanation that mismatching produced negative affect that decreased enjoyment. Enjoyment increased only when brand matching could signal that the products had been coordinated. When brand matching could not provide this signal (i.e., when we communicated that the products do not influence each other),

Please use DOI when citing. Page numbers are not final.

enjoyment was relatively lower and similar to that of mismatched brands. This suggests that inferences of product coordination, and therefore brand matching, led to increased enjoyment. If mismatching is driving our results, then an inability to influence each other should have no effect on the pattern of enjoyment as the mismatch is still always present (or perhaps even increase enjoyment because mismatching should matter less). The data did not support the predictions of this alternative account, but rather confirmed our proposed process of inferred coordination increasing enjoyment. In the next study, we specify the construct of product coordination by linking it directly to the activities that could enhance the combined quality of the products (i.e., research and design), and we provide more evidence of its underlying role by explicitly manipulating it.

STUDY 4

The first objective of this study is to demonstrate the specificity of the product coordination inference. Recall that our theory proposes that it is the specific coordination of research and design of the products that leads to more enjoyment because these activities focus on making the products work well together. Therefore, communicating that other activities have been coordinated (e.g., coupons and distribution) should not produce the brand matching effect.

The second objective of this study is to provide further evidence of product coordination as an underlying mechanism. If inferences of product coordination underlie the brand matching effect, then experiences involving products from different brands should be improved by explicitly communicating that the brands coordinated the research and design of their products. At the same time, experiences involving products from the same brand should not be affected by this information because people already infer that such coordination has taken place. In sum, product combinations should be more enjoyable if we either match the brands or tell people that the brands have coordinated the research and design of the products.

Method

One hundred and twenty-four undergraduate students at the University of Minnesota participated in exchange for course credit. This study employed a 2 (brand matching: matching brand labels or mismatching brand labels) × 2 (coordination type: distribution and coupons; or research and design) between-subjects design. We again used tortilla chips and salsa, but we removed any formal brand names to reduce name-based inferences. Instead, as is common in taste tests, we used simple Brand A and Brand B labels that were fully counterbalanced across the two products.

We manipulated the coordination type by varying a single line of text in the instructions. In the distribution and coupons condition, participants read that the brand(s) had "coordinated the distribution and coupons for these two products." In the research and design condition, participants read that the brand(s) had "coordinated the design of these prod-

ucts and market research on how they tasted together." Participants then ate the chip and salsa and rated the experience on 133 millimeter line scale measures for enjoyment (anchored by "least enjoyable experience ever" and "most enjoyable experience ever") and taste (anchored by "worst chips and salsa I've ever had" and "best chips and salsa I've ever had").
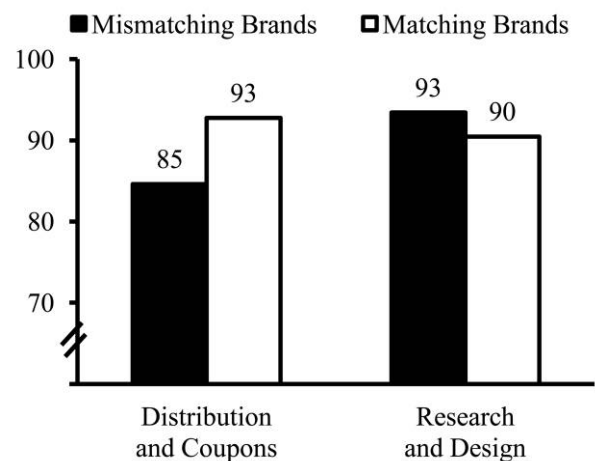
Results

The two dependent measures were highly correlated ($r = .72$, $p < .001$), so we averaged them to form a single enjoyment index ($\alpha = .84$). A 2 × 2 ANOVA on this enjoyment index revealed a significant two-way interaction ($F(1, 120) = 4.00$, $p < .05$) and no significant main effect of either brand matching ($F < 1$, NS) or coordination type ($F(1, 120) = 1.39$, $p > .24$).

We performed planned contrasts to understand the nature of the interaction shown in figure 4. When told the brands had coordinated the distribution and coupons of the two products, we replicated our core finding that products labeled with matching brands were enjoyed more than those labeled with mismatching brands ($M_{\text{Matching}} = 92.75$ vs. $M_{\text{Mismatchimg}} = 84.61$; $t(120) = 2.09$, $p < .04$). However, when it was communicated that the brands had coordinated the research and development for the two products, this difference in enjoyment was eliminated ($M_{\text{Matching}} = 90.47$ vs. $M_{\text{Mismatching}} = 93.41$; $t < 1$, NS). It appears that knowing that two different firms collaborated on research and design has the same effect on enjoyment as sharing a single brand, and people already infer this coordination happened for products with matching brand labels. Additional support for this account is the fact that the information about the type of coordination had no effect when there were matching brand labels ($M_{\text{R\&D}} = 90.47$ vs. $M_{\text{Dist}} = 92.75$; $t < 1$, NS).

FIGURE 4

ENJOYMENT RATINGS BY CONDITION IN STUDY 4

Discussion

This study provides further evidence that inferred coordination underlies the brand matching effect. Telling people that the products had been coordinated to work together through joint research and design made products with mismatching brand labels just as enjoyable as products with matching brand labels. This moderating evidence not only supports our proposed account but also provides more detail regarding the construct of product coordination. Inferences of product coordination make consumption experiences better when related to research and design activities but not when related to other activities such as distribution and promotions. This happens presumably because only the former would actually lead to products that uniquely work well together.

This study also suggests an important boundary condition, as brand matching will not matter much if the two brands already explicitly emphasize a partnership based on research and design. Thus, the results provide marketers with a strategy to mimic the effect of brand matching when a single brand does not manufacture all the products that are jointly consumed. Specifically, marketers in these situations should communicate that they design and test their products with the brands that are frequently combined with their own.

GENERAL DISCUSSION

This research studies how brands combine to influence the enjoyment of an experience. The question of how a brand creates utility is critical for understanding things such as consumer satisfaction, market share, and willingness to pay. Market researchers often answer this question by directly asking how much a brand is preferred, and utility maximization theory proposes that consumers should just pick the brand they favor the most. Although assessing brands in this vacuum may offer simplicity, it ignores the fact that everyday consumption episodes often involve multiple products. Our research shows that the combined effect of brands on enjoyment does not equal the simple sum of the effect of each brand in isolation. We find instead that people enjoy products with matching brand labels more than those with mismatching brand labels. Thus, the apparently simple question of "which brand is preferred?" has no single answer—it depends on the other brands with which it is consumed.

We propose that brands interact because the presence of matching brand labels leads people to infer that the products have been designed and tested to uniquely work together. This cue of higher joint quality then makes the consumption experience more enjoyable. We provide evidence for this effect and our theoretical mechanism across a series of studies. People chose matching brands for products to be consumed together even if it meant picking a nonfavored brand (study 1), and having matching brands translated into greater enjoyment upon joint consumption (studies 2–4). We provide support for the effect using both real brands (study 1) and fictitious brands (studies 2–4), and we replicate it across a range of product categories. We further demonstrated that inferred product coordination was the underlying mechanism by attenuating the effect for matching brands (study 3) and recreating the effect for mismatching brands (study 4) using theoretically informed moderators. Finally, we used the theoretical mechanism to identify communication strategies for mismatching brands (study 4). Overall, our findings establish that brand matching improves the joint consumption experience by cueing inferences that the products were designed and tested to uniquely go well together.

In addition to providing evidence for product coordination as the underlying mechanism, our studies also suggest that alternative mechanisms have difficulty fully accounting for our findings. These include a positive affective response to stimuli that are symmetric (Mealey et al. 1999) or perceptually fluent (Alter and Oppenheimer 2008; Schwarz 2004). Positive affect generated by visually matching labels may contribute to our effect, but it cannot explain why our moderators turn the matching effect on and off. The effect of matching on enjoyment disappeared when we told participants that the two product categories do not interact (e.g., foods stimulate different parts of the tongue), and mismatched brands were enjoyed just as much as matched brands in study 4 when participants were told the brands coordinated their product efforts. Likewise, past work has shown that brands are evaluated more favorably in isolation than in the context of other brands (Posavac et al. 2004). Although this isolation effect may resemble our findings, it also cannot explain the moderation results in studies 3 and 4. Meanwhile, product coordination provides a single parsimonious account for the entire package of findings. Of course, it is still likely that other mechanisms (e.g., an affective response to symmetry) contribute some to the effects we report, and they could potentially play a larger role in other settings.

Our theory for a brand matching effect contributes to the literature in several ways. First, our findings highlight the importance of brand interactions for understanding enjoyment. The widespread view of utility maximization suggests an additive model of brand liking, where the brand of each product carries with it a fixed amount of utility (Guadagni and Little 1983; Keller 1993). We move beyond this model and show that utility is also delivered at the level of the brand combination (i.e., an interaction). Second, the brand matching effect demonstrates a new way to increase enjoyment without changing what is objectively being consumed. This extends past work on how the quality of a brand affects enjoyment (Allison and Uhl 1964; Hoegg and Alba 2007). However, in contrast to past findings, our effects do not require consumers to pay a premium price or firms to heavily invest in building a premium brand. Consumers may improve their well-being by matching the brands they consume, and firms may deliver more value by offering jointly consumed products. Third, we identify product coordination as a new role that brands play in the marketplace. This coordination role adds to previous research showing that brands can provide a signal of quality (Aaker 1996; Erdem and Swait 1998; Klein and Leffler 1981; Wernerfelt 1988),

communicate manufacturing competencies (Aaker and Keller 1990; Broniarczyk and Alba 1994a), serve as figures of attachment (Fournier 1998), and indicate group associations (Belk 1988). Unlike most brand roles, however, the product coordination role appears to be quite general across brands regardless of preexisting associations. The present research thus provides further insight into what it means to be a brand and how the mere concept of a brand can create greater utility for consumers.

We do recognize that the brand matching effect may not hold for every possible combination of brands. Mismatching brands may be preferred when each brand specializes in only one of the product categories or when expert consumers have nuanced preferences in each product category. In such cases, although the brand matching effect may be offset by other factors, we still posit that using the same brand confers "bonus" enjoyment beyond what would be expected by simply considering the liking for each brand individually. To illustrate, consider brand combinations of peanut butter and jelly. A specialized combination of Jif Peanut Butter and Welch's Grape Jelly might be liked more than either matching brand combination, since each brand has expertise in only one of the categories. However, note that the other mismatching combination of Welch's Peanut Butter and Jif Grape Jelly would be particularly disliked because of both little expertise and mismatching. We also expect that consumers may sometimes want different brands to curb satiation (McAlister 1982) or to satisfy a need for stimulation (Berlyne 1960). Nevertheless, we expect brand matching to generally outweigh these factors as variety seeking for brands tends to be lower than for sensory-based attributes (Inman 2001). Finally, we expect that extremely broad brands may find it difficult to leverage the brand matching effect. Consumers may view such brands as unlikely coordinators due to the enormous number of products they offer. Future research will need to test these and other possible boundary conditions.

Future work should also study how the brand matching effect may affect the constituent products of a joint consumption experience. In our studies, we focus on the utility created within the experience itself; however, people often consume products both with and without their complements (e.g., chips and salsa or chips alone). Future work could explore whether the benefits of brand matching carry over to subsequent consumption episodes in which the constituent products are consumed in isolation. More generally, research is needed to understand the full range of effects of joint consumption experiences on utility. The product coordination inherent in brand matching provides one answer, but future work will need to explore this construct more deeply as well as uncover other constructs affecting enjoyment.

Future work should also explore how the notion of brands as product coordinators advances theory on brand extension fit. Fit can occur when a brand's original product category and new extension category are similar (Boush and Loken 1991) or share an important attribute (Broniarczyk and Alba 1994a). Fit signals to consumers that a brand makes a high-quality extension by leveraging its expertise in the original category. Our work contributes to this literature by showing that fit not only occurs at the category level (e.g., chips and salsa) but also at the brand level (e.g., specific brands of chips and salsa). Specifically, we highlight that products with matching brands go together better than products with mismatching brands. This implies that a brand extending to a complementary category will have an advantage over firms not in both categories. Because consumers enjoy complementary products more when they share the same brand, consumers should want to use a new extension more with products from the matching parent brand. Thus, the choice share of a firm in the original brand category should increase after introducing a complementary extension. For example, Colgate may have gained share in toothpaste after extending to the toothbrush category. Future research should consider using point-of-sale data to confirm this prediction.

Our theoretical explanation also suggests ways firms could mimic the brand matching effect. We found that telling consumers that two different brands worked together on the research and development of their products produced the same level of enjoyment as consuming matching brands. This suggests that communicating relationships at the brand level may be a useful tool to create enjoyment when the product categories are complementary. Specifically, joint advertising emphasizing that the partner firms collaborate on research and development activities could be a cost effective way to increase enjoyment when two firms know their products are often consumed together. Brand managers should therefore look to explicitly partner with other suitable brands when they do not make both complementary products (e.g., co-branding). Future research will need to identify other communication and branding strategies to deliver more enjoyment to consumers through the brand matching effect.

It is clear that branding is an important question for both marketers and consumers, and it is made more difficult by the fact that consumers mix brands together quite often. Our work provides a base for understanding how these brand interactions affect enjoyment. Future work will need to further our understanding of how brand combinations affect the consumer experience, with the goal of creating more enjoyable experiences for consumers.

REFERENCES

Aaker, David A. (1996), *Building Strong Brands*, New York: Free Press.

Aaker, David A., and Kevin Lane Keller (1990), "Consumer Evaluations of Brand Extensions," *Journal of Marketing*, 54 (January), 27–41.

Allison, Ralph I., and Kenneth P. Uhl (1964), "Influence of Beer Brand Identification on Taste Perception," *Journal of Marketing Research*, 1 (August), 36–39.

Alter, Adam L., and Daniel M. Oppenheimer (2008), "Uniting the Tribes of Fluency to Form a Metacognitive Nation," *Personality and Social Psychology Review*, 13 (3), 219–35.

Belk, Russell (1988), "Possessions and the Extended Self," *Journal of Consumer Research*, 15 (September), 139–68.

Berger, Jonah, and Chip Heath (2007), "Where Consumers Diverge

Please use DOI when citing. Page numbers are not final.

from Others: Identity-Signaling and Product Domains," *Journal of Consumer Research*, 34 (August), 121–34.

Berlyne, D. E. (1960), *Conflict, Arousal, and Curiosity*, New York: McGraw-Hill.

Boush, David M., and Barbara Loken (1991), "A Process-Tracing Study of Brand Extension Evaluation," *Journal of Marketing Research*, 28 (February), 16–28.

Broniarczyk, Susan M., and Joseph W. Alba (1994a), "The Importance of the Brand in Brand Extension," *Journal of Marketing Research*, 31 (May), 214–28.

——— (1994b), "The Role of Consumers' Intuitions in Inference Making," *Journal of Consumer Research*, 21 (3), 393–407.

Chaiken, Shelly (1980), "Heuristic versus Systematic Information Processing and the Use of Source versus Message Cues in Persuasion," *Journal of Personality and Social Psychology*, 39 (5), 752–66.

Erdem, Tulin (1998), "An Empirical Analysis of Umbrella Branding," *Journal of Marketing Research*, 35 (August), 339–51.

Erdem, Tulin, and Joffre Swait (1998), "Brand Equity as a Signaling Phenomenon," *Journal of Consumer Psychology*, 7 (2), 131–57.

Fishbach, Ayelet, Rebecca K. Ratner, and Ying Zhang (2011), "Inherently Loyal or Easily Bored? Nonconscious Activation of Consistency versus Variety-Seeking Behavior," *Journal of Consumer Psychology*, 21 (1), 38–48.

Fournier, Susan (1998), "Consumers and Their Brands: Developing Relationship Theory in Consumer Research," *Journal of Consumer Research*, 24 (March), 343–73.

Guadagni, Peter M., and John D. C. Little (1983), "A Logit Model of Brand Choice Calibrated on Scanner Data," *Marketing Science*, 2 (3), 203–38.

Harris, Judy, and Edward A. Blair (2006), "Functional Compatibility Risk and Consumer Preference for Product Bundles," *Journal of the Academy of Marketing Science*, 34 (1), 19–26.

Hoegg, JoAndrea, and Joseph W. Alba (2007), "Taste Perception: More Than Meets the Tongue," *Journal of Consumer Research*, 33 (March), 490–98.

Inman, J. Jeffrey (2001), "The Role of Sensory-Specific Satiety in Attribute-Level Variety Seeking," *Journal of Consumer Research*, 28 (June), 105–20.

Keller, Kevin Lane (1993), "Conceptualizing, Measuring, and Managing Customer-Based Brand Equity," *Journal of Marketing*, 57 (January), 1–22.

Klein, Benjamin, and Keith B. Leffler (1981), "The Role of Market Forces in Assuring Contractual Performance," *Journal of Political Economy*, 89 (4), 615–41.

Koffka, Kurt (1935), *Principles of Gestalt Psychology*, London: Lund Humphries.

Lawless, Michael W. (1991), "Commodity Bundling for Competitive Advantage: Strategic Implications," *Journal of Management Studies*, 28 (3), 267–80.

Lee, Leonard, Shane Frederick, and Dan Ariely (2006), "Try It, You'll Like It: The Influence of Expectation, Consumption, and Revelation on Preferences for Beer," *Psychological Science*, 17 (12), 1054–58.

McAlister, Leigh (1982), "A Dynamic Attribute Satiation Model of Variety-Seeking Behavior," *Journal of Consumer Research*, 9 (September), 141–50.

Mealey, Linda, Ruth Bridgstock, and Grant C. Townsend (1999), "Symmetry and Perceived Facial Attractiveness: A Monozygotic Co-Twin Comparison," *Journal of Personality and Social Psychology*, 76 (1), 151–58.

Menon, Satya, and Barbara E. Kahn (1995) "The Impact of Context on Variety Seeking in Product Choices," *Journal of Consumer Research*, 22 (December): 285–95.

Park, C. Whan, Bernard J. Jaworski, and Deborah J. MacInnis (1986), "Strategic Brand Concept-Image Management," *Journal of Marketing*, 50 (October), 135–45.

Park, C. Whan, S. Youl Jun, and Allan D. Shocker (1996), "Composite Branding Alliances: An Investigation of Extension and Feedback Effects," *Journal of Marketing Research*, 33 (November), 453–66.

Plassman, Hilke, John O'Doherty, Baba Shiv, and Antonio Rangel (2008), "Marketing Actions Can Modulate Neural Representations of Experienced Pleasantness," *Proceedings of the National Academy of Sciences*, 105 (3), 1050–54.

Posavac, Steven S., David M. Sanbonmatsu, Frank R. Kardes, and Gavan J. Fitzsimons (2004), "The Brand Positivity Effect: When Evaluation Confers Preference," *Journal of Consumer Research*, 31 (December), 643–51.

Ratner, Rebecca K., Barbara E. Kahn, and Daniel Kahneman (1999), "Choosing Less-Preferred Experiences for the Sake of Variety," *Journal of Consumer Research*, 26 (June), 1–15.

Schwarz, Norbert (2004), "Metacognitive Experiences in Consumer Judgment and Decision Making," *Journal of Consumer Psychology*, 14 (4), 332–48.

Shine, Byung Chul, Jongwon Park, and Robert S. Wyer Jr. (2007), "Brand Synergy Effects in Multiple Brand Extensions," *Journal of Marketing Research*, 44 (November), 663–70.

Shiv, Baba, Ziv Carmon, and Dan Ariely (2005), "Placebo Effects of Marketing Actions: Consumers May Get What They Pay For," *Journal of Marketing Research*, 42 (November), 383–93.

Wernerfelt, Birger (1988), "Umbrella Branding as a Signal of New Product Quality: An Example of Signaling by Posting a Bond," *RAND Journal of Economics*, 19 (3), 458–66.

Wilson, Lynn O., Allen M. Weiss, and George John (1990), "Unbundling of Industrial Systems," *Journal of Marketing Research*, 27 (May), 123–38.

Zajonc, Robert B. (1968), "Attitudinal Effects of Mere Exposure," *Journal of Personality and Social Psychology*, 9 (2), 1–27.

Please use DOI when citing. Page numbers are not final.