The Effects of Perceived Product-Association Incongruity on Consumption Experiences

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• Purpose: Product evaluations are positively influenced when there is moderate incongruity (slight mismatch rather than a perfect match or mismatch) between a product and its association; this is termed the moderate schema incongruity effect (Mandler 1982). The current study investigated whether incongruity between wine and one of its extrinsic cues (e.g., sponsor) would influence consumers’ taste evaluations, and whether this match or mismatch would influence high and low wine knowledge consumers differently.

• Design/Methodology: Two wine tasting studies were conducted whereby participants sampled three wines that were associated with different celebrity athlete sponsors (unbeknownst to participants, all wine samples were identical). In both experiments, participants’ level of wine knowledge was measured (Hughson and Boakes 2001). Experiment 2 primed participants to evaluate the wine samples using either their athlete schema or wine schema.

• Findings: Experiment 1 found that only high wine knowledge consumers’ gave the moderately incongruent wine-athlete pairing the highest evaluation. Experiment 2 did not find a significant difference in participants’ wine evaluations between the athlete and wine priming conditions.

• Practical Implications: If wineries engage in a sponsorship agreement, they should take into careful consideration the fit with the sponsor. A moderately incongruent fit between wine and a sponsor can enhance consumers’ consumption experiences, which can lead to increased satisfaction, positive word-of-mouth, and repeat purchases. Additionally, factors other than the fit between wine and its sponsor may influence consumers’ wine evaluations, such as the monetary value that consumers think a celebrity was paid to become a wine sponsor.

Key words: moderate schema incongruity, wine, tasting evaluation, athlete, sponsor.
THEORETICAL FRAMEWORK

Consumer preferences for products not only depend on the perception of a product’s intrinsic qualities, but also on the perception of the product’s extrinsic cues. Intrinsic cues are derived from a product’s physical characteristics (e.g., taste, texture), whereas extrinsic cues are attributes that are a result of marketing-related activities (e.g., price, advertising; Olson and Jacoby 1972). The way in which wines are marketed can lead consumers to perceive that these products as either congruent or incongruent based on their wine schema. A schema is an individual’s knowledge structure of an object, and serves as a frame of reference in forming judgments (Mandler 1982). Activation of a schema occurs when an object stimulates a concept or feature that is stored in a consumer’s memory (Cohen and Ebbesen 1979). For example, when a consumer sees a bottle of Coca-Cola, their soft drink schema is activated, and concepts within this schema, such as carbonation, sweet, preservatives, and cola, come to mind.

The level of congruity or incongruity is determined by the degree of match or mismatch between the attributes of an object and the related schema (e.g., the fit between the product or brand, and the product category schema; Lee and Schumann 2004; Mandler 1982; Meyers-Levy and Tybout 1989; Stayman et al. 1992). For example, a consumer will perceive Coca-Cola (standard carbonated cola soft drink) to be more congruent with their soft drink schema than Orangina (carbonated soft drink that contains orange juice); this is the case because consumers do not perceive Coca-Cola as possessing any features that mismatch their soft drink schema but they do perceive Orangina as possessing features that mismatch their soft drink schema (fruit juice).

The level of schema congruity between an object and its association influences both the valence (positive or negative evaluation) and degree (intense or mild evaluation) to which a consumer affectively responds to an object (Mandler 1982). Individuals do not perceive congruent products as surprising, but rather as familiar, because there is no mismatch between the product and their schema. Therefore, congruity results in no significant change to their affective state. Conversely, consumers perceive moderately incongruent products as surprising and novel because of the slight mismatch between the product and their schema; given this slight mismatch, consumers can easily resolve moderately incongruent information. This successful and easy resolution, combined with the feeling of surprise and perception of novelty, causes consumers to experience positive affective responses toward moderately incongruent products. Consumers also perceive highly incongruent products as surprising because of the extreme mismatch between the product and their schema. However, consumers’ attempt to resolve highly incongruent information is not easy and tends to results in frustration. Therefore, consumers experience negative affective responses toward highly incongruent products (Mandler 1982; Meyers-Levy and Tybout 1989; Peracchio and Tybout 1996).

Previous studies on intrinsic, rather than extrinsic cue-product incongruity, have found that only low knowledge (LK) participants demonstrated the moderate schema incongruity effect (MSIE) in their product evaluations: LK participants had the highest preferences for moderately incongruent bakery products (e.g., product described as a “spicy cake”) presumably because they focus on super-ordinate product associations (match between the product and other similar products). High knowledge (HK) participants did not demonstrate the MSIE in their evaluations, presumably because they access sub-ordinate product associations (“high-calorie dessert” product received the lowest evaluation because of their negative feelings towards this description; Peracchio and Tybout 1996). The current work extends beyond Peracchio and Tybout’s (1996) research by investigating the effect of extrinsic cue-product incongruity on consumer evaluations and the moderating influence of salient product associations (via pre-experimental knowledge, or priming). Furthermore, to the best of our knowledge, no extant research has investigated the effect of the congruity between wine and its sponsor on consumer
taste evaluations of wine samples. Knowledge level as a moderator will enable wine marketers to better segment and target their market, and priming as a moderator will enable marketers to better create advertising campaigns.

HYPOTHESES

Given that marketing related activities (i.e., extrinsic cues) can influence consumer preferences, it is expected that the level of congruity between wine and one of its extrinsic cues (e.g., its sponsor) will affect consumers’ evaluations. Furthermore, given that consumers’ schema network influences consumer wine evaluations (Collins and Loftus 1975; Peracchio and Tybout 1996; Quillian 1962, 1967) and that the level of consumers’ product knowledge influences the number and configuration of associations in their product schema (Chi and Koeske 1983), it is expected that product knowledge will interact with extrinsic cue-product incongruity.

The more associations within a consumer’s wine schema, the weaker each relational link within the concept will be (the case of HK consumers), whereas the fewer associations within a consumers’ wine schema, the stronger each relational link will be (the case of LK consumers; Collins and Loftus 1975; Quillian 1962). We postulate that the degree of wine-extrinsic cue congruity will affect wine evaluations for only HK consumers because of their extensive wine schema. For example, a wine aficionado who sees a celebrity-sponsored wine might perceive the celebrity to “stand out” as a novel product association. Given HK consumer’s extensive wine schema, they will not perceive the sponsor to be an essential wine association. Conversely, given LK consumers’ limited wine schema, the sponsor will be an essential association and might not stand out as a novel association; therefore, the degree of wine-extrinsic cue congruity will not affect LK consumers’ wine evaluations. Thus:

H1a: LK participants will not demonstrate the MSIE in their wine evaluations.
H1b: HK participants will demonstrate the MSIE in their wine evaluations.

In addition to consumers’ level of wine knowledge, it is expected that consumers’ schema activation threshold (Norman and Shallice 1986) will influence the effect of wine-extrinsic cue incongruity on consumers’ wine evaluations. A triggering condition in the external world will activate only the most active schema and, in turn, its corresponding sub-schemas, whereas all other schemas that could accomplish the same goal will be suppressed (Norman and Shallice 1986). For example, when evaluating a sponsored wine, either consumers’ sponsor or wine schema—which ever schema is most active—will be used for the evaluation task.

Priming statements can make consumers’ schemas more or less active (Cooper and Shallice 2000). A prime that focuses on wine will reduce the activation threshold for participants’ wine schema; participants’ wine schema, and corresponding sub-schemas, will be activated, whereas all other schema will be suppressed. A wine-related prime that reminds participants that wine is almost always sponsored by athletes, if wine is sponsored by any celebrity, will lead participants to not perceive this wine-athlete pairing as novel. Therefore, we do not expect to observe the MSIE in participants’ wine evaluations when they are presented with a wine prime that focuses on the frequency of athletes as wine sponsors.

Conversely, a prime about a sponsor (e.g., an athlete), will reduce the activation threshold for participants’ sponsor schema; participants’ athlete schema, and related sub-schemas, will be activated. An athlete sponsor prime that reminds participants that athletes are known to sponsor various types of products (e.g., watches, cologne, etc.), will make an athlete-wine pairing stand out and participants will perceive this pairing to be novel. Therefore, we expect to observe the MSIE in participants’ product evaluations when they are presented with an athlete prime that focuses on the various products that athletes sponsor. Thus:
H2b: Participants whose product schema has a lower activation threshold will not demonstrate the MSIE in their wine evaluations.
H2a: Participants whose sponsor schema has a lower activation threshold will demonstrate the MSIE in their wine evaluations.

STUDY 1 METHOD

Wine was chosen as our focal product because we could examine knowledge levels (Hughson and Boakes 2001). One hundred and fifteen students from a large north-eastern North American university participated. We used a within-subjects design with three levels of congruity (matches with wine: high (Vijay Singh, golfer) vs. moderate (Jeremy Wotherspoon, speed skater) vs. low (Dwayne “The Rock” Johnson, wrestler)) between wine and its sponsor. Participants were given three 20ml samples of the same wine (believing they were different brands of the same grape varietal—Pinot Noir) and proper wine tasting instructions (Ross and Weller 2007). Participants rated the wine based on their overall liking, willingness to pay (WTP; Siegrist and Cousin 2009), and willingness to buy (WTB; Wszelaki et al. 2005); participants also completed a wine knowledge questionnaire (Hughson and Boakes 2001), and ranked their liking, familiarity, and perceived degree of fit with wine of various male athletes.

STUDY 1 RESULTS AND DISCUSSION

Replicating our pilot results, we found significant differences in perceived congruity across all three athletes ($M_{Singh}$=3.33, $M_{Wotherspoon}$=4.92, $M_{The Rock}$=6.67; all $p<.001$). Participants were categorized into LK (n=64) and HK (n=37) groups. A mixed model ANOVA with congruity level (low, moderate, high) as the within-subjects variable and knowledge level (high, low) as the between-subjects variable was conducted. There was a significant congruity level × knowledge level interaction effect for liking ($F(2,198)=3.38, p<.04$), WTB ($F(2,183)=3.30, p<.05$) and log(WTP) ($F(2,186)=3.36, p<.04$).

There were non-significant differences across congruity levels for LK participants’ liking (all $p>.39$), WTB (all $p>.22$), and log(WTP) (all $p>.21$). HK participants liked the moderately incongruent pairing ($M_{HK,Wotherspoon}=4.05$) more than the congruent ($M_{HK,Singh}=3.46$; $t(36)=2.83$, $p<.01$) and highly incongruent pairing ($M_{HK,The Rock}=3.41$; $t(36)= 2.16$, $p<.04$); had higher WTB for the moderately incongruent pairing ($M_{HK,Wotherspoon}=3.51$) than the congruent ($M_{HK,Singh}=2.86$; $t(36)=2.21$, $p<.04$) and highly incongruent pairing ($M_{HK,The Rock}=2.84$; $t(36)=1.75$, $p<.09$); and had higher WTP for the moderately incongruent pairing ($M_{HK,Wotherspoon}=$14.95) than the congruent ($M_{HK,Raw Singh}=$12.62; $t(35)=2.86$, $p<.01$) and highly incongruent pairing ($M_{HK,Raw The Rock}=$12.62; $t(34)=1.89$, $p<.07$). See Figures 1 through 3. These results support H1a and H1b.
Fig 1: Overall Liking, by Knowledge Level

Fig 2: Willingness to Buy, by Knowledge Level

Fig 3: Willingness to Pay, by Knowledge Level
Only HK participants demonstrated the MSIE. Given HK participants’ many product associations within their wine schema, the sponsor was a novel product association, causing a perception of moderate incongruity; this incongruity needed resolving (assimilation) which increased evaluations. Conversely, given LK participants’ few product associations within their wine schema, the sponsor was not a novel association, causing a perception of congruity, which neither needed resolving nor affected evaluations. Taken together, these results suggest that the degree with which an extrinsic cue “stands out” relative to a consumer’s product knowledge is an important factor in determining when the MSIE will occur in wine evaluations.

STUDY 2 METHOD

Experiment 2 employed a design and procedure similar to that of Experiment 1, with two exceptions. First, Experiment 2 used a different set of three athletes as sponsors of wine (Michelle Wei, golfer, congruent; Catriona Le May Doan, speed skater, moderately incongruent; Hope Solo, soccer player, highly incongruent). A pilot study with various different athletes found these three athletes to be significantly different in perceived congruity with wine (all \( p < .05 \)). Second, participants were randomly assigned to either the sponsor or product prime condition (see Appendix A). Participants read the priming statements prior to tasting and evaluating the wine samples.

STUDY 2 RESULTS AND DISCUSSION

The manipulation for perceived incongruity did not replicate the pilot study results. Although the Michelle Wei was perceived as a significantly better match than Catriona Le May Doan and Hope Solo (\( M_{Wei}=3.53, M_{Le\ May\ Doan}=5.43, M_{Solo}=5.72; \) both \( p < .001 \)), there was no significant difference in perceived congruity between Catriona Le May Doan and Hope Solo (\( p > .49 \)). A mixed model ANOVA with congruity level (low, moderate, high) as the within-subjects variable and prime condition (athlete, wine) as the between-subjects variable was conducted. However, the analysis found that there were no interaction for liking (\( F(2, 132)=45, p > .63, \text{MSE}=1.57 \)), WTB (\( F(2, 132)=.53, p > .59, \text{MSE}=1.76 \)) and log(WTP) (\( F(2, 120)=.12, p > .88, \text{MSE}=.01 \)). See Figures 4 through 6. These results support neither H2a nor H2b.

![Fig 4: Overall Liking, by Prime Condition](image-url)
A further investigation into the data was conducted to determine alternative explanations for a lack of congruity level × prime condition interaction effect. One alternative explanation is because of the failed manipulation check. This may have happened because the manipulation check for Experiment 2 was conducted under a different experimental condition than the pilot study. Participants in Experiment 2 were exposed to the priming statements before they completed the manipulation check; given that the goal of the primes was to influence how unusual/common participants perceived athletes as wine sponsors or and wine to be sponsored by athletes, the primes in Experiment 2 could have negatively affected the results of the manipulation check.

Another alternative explanation is participants’ attributions of how much they thought the athletes were paid to become wine sponsors. Participants thought that Michelle Wei was paid significantly more than Catriona Le May Doan ($M_{Wei} = $680,576.09; $M_{Le May Doan} = $373,306.12; $t(45) = 2.06, p < .05$) and that Hope Solo was paid significantly more than Catriona Le May Doan ($M_{Solo} = $677,588.24; $t(48) = 1.92, p < .07$), whereas they did not think that there was a difference in how much Michelle Wei and Hope Solo were paid ($t(45) = .63, p > .52$). Given that participants thought that Catriona Le May Doan was paid significantly less than Michelle Wei and Hope Solo.
to sponsor the wine, this could have affected how they evaluated the wine samples and their perception of fit with wine.

**GENERAL DISCUSSION**

The primary goal of this research was to determine whether participants’ perceived wine-extrinsic cue congruity would influence their taste perceptions of wine. A secondary goal of this research was to determine whether participants would demonstrate the MSIE based on their level of product knowledge or their most active schema.

The results of Experiment 1 demonstrated that participants’ perceived congruity between wine and its extrinsic cue (e.g., athlete sponsor), as well as their level of wine knowledge influenced their product evaluations. That is, HK participants gave the highest evaluations to the moderately incongruent wine-athlete pairing, whereas LK participants’ evaluations did not differ across wine-athlete pairings. We may have observed these results because LK consumers have a rudimentary wine schema and were not able to perceive subtle differences in congruity across the three wine-athlete pairing samples.

The goal of Experiment 2 was to determine whether participants would demonstrate the MSIE based on their threshold of schema activation, regardless of their level of wine knowledge. Given that a triggering condition activates only the most active schema, priming statements were developed to activate either participants’ wine schema or sponsor schema (i.e., athlete schema,). The goal of these priming statements was to influence participants’ perception of wine-extrinsic cue incongruity, which would, in turn, influence their product evaluations. However, the congruity manipulation check for Experiment 2 was not supported and results did not show an interaction effect between congruity level and prime condition.

The results of our studies have important practical implications for wineries and wine marketers. First, if wineries engage in a sponsorship agreement with a celebrity, they should take into careful consideration the fit between the wine and the sponsor. A moderately incongruent fit between wine and a sponsor can enhance consumers’ consumption experiences, which can lead to increased satisfaction, positive word-of-mouth, and repeat purchases. Second, factors other than the fit between wine and its sponsor may also influence consumers’ wine evaluations. For example, how much consumers thought the celebrity was paid to become a wine sponsor may influence their wine evaluations.

**CONCLUSION**

The current findings extend the understanding of the role of perceived wine-sponsor incongruity on consumers’ wine evaluations. Previous research demonstrates that moderate incongruity between a product and one of its *intrinsic* cues, such as the product’s description, enhances LK participants’ product evaluations. Across two studies, we demonstrated that moderate incongruity between a wine and one of its *extrinsic* cues, such as the wine’s sponsor or co-brand, enhances HK participants’ wine evaluations.

Our results also suggest that factors other than perceived incongruity may play a role in influencing consumers’ sensory evaluations. More specifically, the monetary value that consumers think a wine’s sponsor was paid may influence consumers’ product evaluations. Future research is required to more accurately measure the influence of potential mediators (e.g., sponsorship attributions, sequence effects) on the relationship among wine, extrinsic cues, and wine evaluation. Understanding the role of perceived moderate incongruity on wine evaluations will enable marketers to enhance consumers’ consumption experiences and purchase behaviour toward their brands.
APPENDIX A

Athlete Prime
Athletes sponsor products to support themselves, especially if they compete in sports that don’t pay big salaries or large awards so they can pay for training, food, housing and other essential needs. Athletes are very popular sponsors who are easily recognized by consumers, and are known for endorsing a wide range of products, including but not limited to sports equipment, athletic gear, financial services, wine, and luxury wristwatches.

Wine Prime
Wineries name their wine brand or attach it with a sponsor or celebrity name so that their product is easy to remember. Wines are almost always a word in a foreign language, named after the founding family’s surname or celebrity or athlete who owns the winery. Sometimes, a wine is named after a special location or may have a funny or creative name to stand out among other wine brand names.
REFERENCES


