

Shall I Tell You Now or Later? Assimilation and Contrast in the Evaluation of Experiential Products

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This research demonstrates that the effect of product information on the evaluation of an experiential product depends on the order with which such information is presented. In a series of experiments, we find that when information is presented before consuming an experiential product, the information results in an assimilation effect such that consumers evaluate the same experience more positively when the product information is favorable compared to when it is unfavorable. More interestingly, we demonstrate that when such information is presented after consuming an experiential product, it results in a contrast effect such that consumers evaluate the same experience more negatively when the product information is favorable compared to when it is unfavorable. These findings have important implications for marketers in a host of experiential categories.

Imagine being at a wine tasting and learning that a wine is expensive after tasting it. Will learning the price afterward affect your evaluation differently compared to if you had learned the price beforehand? It is well documented that information, such as price, learned prior to evaluating a product can affect consumer judgment (Makens 1965; Plassmann et al. 2008). This is particularly true for experiential products because much of experience is ambiguous (Hoch 2002); for example, learning that a wine is expensive before tasting it can actually lead to more pleasure during the experience (Plassmann et al. 2008). Similarly, learning the brand name of food before eating it can make it seem to taste better (Makens 1965). Less is known about how learning information about a product after it is experienced

affects how it is judged. This current research examines how product information learned either before or after the consumption of an experiential product affects consumer evaluation.

Previous research has investigated how presenting information about a product's quality before or after trial affects judgment (Braun 1999; Braun-LaTour and LaTour 2005; Hoch and Ha 1986; Levin and Gaeth 1988). Hoch and Ha (1986) find that advertisements for a shirt promoting high product quality presented both before and after people examined the shirt increase quality judgments. Similarly, Levin and Gaeth (1988) demonstrate that people judge meat to be less greasy and of higher quality when they are told it is 75% lean versus 25% fat both before and after they tasted the meat. More recently, Braun-LaTour and LaTour (2005) find that advertisements presented before and after sampling juice can have a positive effect on both memory-based (see also Braun 1999) and immediate quality judgments. Thus, previous work suggests that when information is presented before and after trial it can have an assimilation effect on consumers' evaluations of quality.

Because the evaluation of experiential products is primarily affect-based (Biswas, Grewal, and Roggeveen 2010), this current research focuses on the effect of product information, learned before or after trial on consumers' affective evaluations. We show that the effect of product information on the evaluation of an experiential product depends on the

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order in which such information is presented. We demonstrate that when product information is presented before trial, it results in an assimilation effect such that consumers evaluate the same product experience more *positively* when the information is favorable compared to when it is unfavorable. Importantly, however, we also show that when such information is presented after trial, it results in a contrast effect such that consumers evaluate the same product experience more *negatively* when the information is favorable compared to when it is unfavorable. To the best of our knowledge, this contrast effect when information is presented after trial has never been previously observed.

In recent years, there has been increasing investigation into how consumers evaluate experiential products, including the effect of distractions while tasting food (Shiv and Nowlis 2004) and how experiential products influence subsequent task performance (Shiv, Carmon, and Ariely 2005) and reward-seeking behavior (Wadhwa, Shiv, and Nowlis 2008). Biswas et al. (2010) demonstrate that when consumers sample experiential products in order, product experiences later in the sequence are often assimilated with those earlier in the sequence such that a positive experience is less preferred when it is preceded by a negative experience. None of this research, however, has examined how product information order influences consumers' affective evaluation of the experience. Nevertheless, because of distraction or by design (e.g., blind tastings), consumers frequently learn product information after their initial experience with a product. Thus, our findings have important implications for marketers in a host of experiential categories ranging from food and beverages, to videos, music, and perfumes.

THE EFFECT OF PRODUCT INFORMATION ON EVALUATION

Consumers often use information about a product, such as its price, brand, or country of origin, to infer its quality (Hong and Wyer 1989), efficacy (Shiv et al. 2005), and even experience (Klaaren, Hodges, and Wilson 1994). As a result, consumers often prefer brand-name products and are willing to pay more for goods even if, based on taste tests, such products perform no better than lower-priced versions. For example, many national food brands, which often taste worse than private label brands in blind tests (Oldenburg 2005), have significantly higher market shares in most product categories. Similarly, a recent examination of over 6,000 blind wine tastings found a slight negative correlation between the price of the wine and the reported enjoyment (Goldstein et al. 2008). Moreover, preference for brand-name beverages often diminishes when the brand label is removed (Allison and Uhl 1964; Dodds, Monroe, and Grewal 1991; Nevid 1981).

Further evidence for the power of product information comes from research showing that varying the information that is presented to consumers can affect how the same experience is judged. For example, Coke is evaluated more favorably when tasted from a cup with a Coke logo com-

pared with an unmarked cup (McClure et al. 2004). A nutritional bar tastes worse when it is labeled as including soy protein compared with when such information is removed (Wansink et al. 2000). People enjoy a movie more when they are told it will be good compared to when such information is not available (Klaaren et al. 1994). Similarly, consumers find that the same energy drink leads to better task performance when it is purchased at its full price compared to when it is purchased at a discount (Shiv et al. 2005).

A common finding in this research is that product information is associated with certain beliefs about the product that influence expectations for its performance (Shiv et al. 2005). These expectations shape how consumers interpret the experience, resulting in evaluations that are assimilated with the product information (Hoch and Ha 1986). When the information cues favorable (unfavorable) expectations, it often leads to more positive (negative) evaluations of the same experience. However, these studies all examined the role of information prior to the product being experienced. Next, we discuss how presenting the same information before and after the trial affects consumers' affective evaluation of a product experience.

INFORMATION BEFORE AND AFTER A PRODUCT EXPERIENCE

Although the sampling of experiential products can result in both cognitive and affective responses (Nowlis and Shiv 2005; Shiv and Nowlis 2004), the evaluation of many experiential products, such as chocolate or wine, is primarily affective in nature (Biswas et al. 2010). Affective reactions result from bottom-up processing and occur automatically in response to a sampling experience (Nowlis and Shiv 2005). Thus, when consumers sample an experiential product, they should spontaneously form an affective evaluation. However, the order with which the information is presented (before or after sampling) should determine whether the information is accessible as consumers spontaneously form their initial affective evaluation. When information is presented before sampling, the information is accessible as they initially evaluate the product. When information is presented after sampling, the information is not accessible until after consumers spontaneously form their initial evaluation. For example, a consumer that is blind tasting a wine is likely to immediately judge how much he likes it before learning its price or country of origin. If the information is learned before sampling, it would be accessible as he is evaluating the experience. This difference in when information becomes accessible—before sampling versus after sampling—should influence how distinct the information is perceived to be and what effect it has on the evaluation of the experience.

Numerous studies demonstrate that the influence of contextual information (e.g., product information) on judgment often depends on how distinct the information is perceived to be from the target being evaluated (Helson 1964; Herr 1986; Stapel and Winkielman 1998). Distinct information

is separate from the target with clear boundaries, which makes it more likely to serve as a comparison standard for judging a target (Stapel and Winkielman 1998; Zhu and Meyers-Levy 2009). Indistinct information does not have clear boundaries, which makes it more likely that the information will be incorporated into the evaluation of the target (Kim and Meyers-Levy 2008; Stapel and Winkielman 1998). Thus, distinct information often results in contrast, whereas indistinct information often leads to assimilation.

One factor that determines the level of distinctness is the extent to which the information is evaluated with the target or separately from the target (Martin and Seta 1983; Stapel and Spears 1996). Martin and Seta (1983) demonstrate that when people read two descriptions (a target and a context) before evaluating the target, the impression of the target is unitized with the context, creating an indistinct interpretation frame, which results in assimilation (Stapel and Winkielman 1998). However, when the target is evaluated separately from the context, the contextual information is perceived to be distinct and result in a contrast effect. This is also consistent with Markman and McMullen (2003), who propose that when people think about a target and a standard together, standard-consistent cognitions are included in the evaluation of the target. However, when people think about the target separately from the standard, the standard serves as a reference point for evaluating the target, which can have a contrast effect on judgment. Their research also suggests that information can serve as a context for judging earlier experiences, such as when people sample an experiential product before learning its price. That is, product information learned after an experience may still influence the evaluation of the experience.

Together, these findings suggest that when product information is presented before sampling, the product information will be accessible during the sampling experience and be viewed as indistinct from the experience; consumers' evaluation of the product experience will be assimilated with the product information. When product information is presented after sampling, consumers will have already spontaneously formed their affective evaluation before receiving the product information. As a result, the information should be distinct from the experience, and consumers' evaluation will be contrasted with the product information. Thus, our central premise is that the influence of product information on consumers' affective evaluation of an experiential product will depend on the order in which the information is provided. When product information is presented before sampling, it will result in an assimilation effect such that consumers will evaluate the product more positively (negatively) when the information is associated with a favorable (unfavorable) experience. However, when the same product information is presented after sampling, it will result in a contrast effect such that consumers will evaluate the same product more negatively (positively) when the information is associated with a favorable (unfavorable) experience.

STUDY 1

The primary purpose of the first study was to test our prediction that product information will have opposite effects on participants' evaluation of an experiential product when it is presented before sampling compared to when it is presented after sampling. We selected chocolate as the product category. A pretest conducted prior to the study led us to select country of origin (Switzerland vs. China) as the favorable or unfavorable product information.

Method

Design. Two hundred sixteen undergraduates participated. The study employed a 2 (country of origin: Switzerland vs. China) by 2 (information order: before sampling vs. after sampling) between-subjects design. The study also included a no-information (control) condition.

Procedure. Participants were told a cover story similar to one used by Braun (1999). They were instructed that the purpose of the study was to evaluate a new chocolate being introduced by a company that was interested in their opinion. They were then given two unbranded squares of chocolate to sample and a survey to complete. The chocolate was a Trader Joe's brand that was selected based on a pretest that determined it was ambiguous in terms of taste. All subjects were told to read the instructions carefully before sampling the chocolate. For half of the respondents, the instructions in the before-sampling conditions informed them that the chocolate they were about to sample was from a manufacturer located in Switzerland (China). They were then instructed to sample the chocolate and answer questions about it in the survey. The participants, in the after-sampling conditions, were first instructed to sample the chocolate. Then, on the next page (before the evaluation measures), they were told that the chocolate they had just sampled was from a manufacturer located in Switzerland (China). They were then instructed to answer questions about the chocolate. All respondents then evaluated the chocolate. Thus, regardless of the presentation order, all respondents received country-of-origin information and sampled the chocolate before evaluating it. In the control condition, participants were given the same cover story but were only instructed to sample the chocolate and then evaluate it. They were not told the country of origin of the manufacturer.

Measures. Participants' evaluation was measured on a five-item 7-point semantic differential scale ("dislike" vs. "like"; "not enjoyable" vs. "enjoyable"; "bad" vs. "good"; "not delightful" vs. "delightful"; "unpleasant" vs. "pleasant"; $\alpha = .96$).

Results

We tested our prediction using analysis of variance (ANOVA) with evaluation as the dependent variable, and country of origin and information order as the independent factors. The main effects of country of origin ($F(1, 161) =$

.07, NS) and information order were insignificant ($F(1, 161) = .04$, NS). The predicted country of origin \times information order interaction effect on evaluation was significant ($F(1, 161) = 25.34$; $p < .001$; see fig. 1). As expected, when the country of origin was provided before tasting the chocolate, evaluation was higher when participants were instructed that the chocolate was from Switzerland ($M_{Sw} = 6.00$, $M_{Ch} = 5.08$; $F(1, 161) = .13.61$; $p < .001$, $r = .28$). Interestingly, and in line with our prediction, when the country of origin was provided after sampling, evaluation was lower when participants were instructed that the chocolate was from Switzerland ($M_{Sw} = 5.10$, $M_{Ch} = 5.92$; $F(1, 161) = .14.34$; $p < .001$, $r = .29$). The mean evaluation of the control, no-information condition ($M_{con} = 5.58$) was significantly different from all other experimental conditions. Thus, when favorable (unfavorable) product information was presented before sampling, it increased (decreased) evaluations, but when it was presented after sampling it decreased (increased) evaluations.

Discussion

The results of the first study are consistent with previous research, which has shown that presenting favorable versus unfavorable product information before sampling a product results in evaluations that are aligned with the information. Importantly, the results also are consistent with our prediction that when the same information is provided after sampling, it results in a contrast effect on the evaluation of the product experience.

STUDY 2

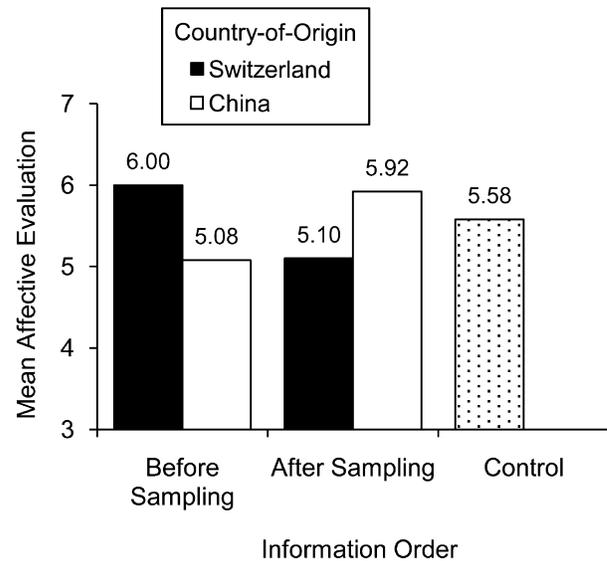
The second study had two objectives. The first objective was to replicate the effects observed in the previous study using different product information. Specifically, we manipulated the price of the product (expensive vs. inexpensive). A second objective was to see if we could weaken the relationship between the product information and the beliefs linking the information with the product experience to reduce the effects. Accomplishing this would show that it is not the product information per se that produces the effects, but rather the beliefs about the product experience that are cued by the product information. To accomplish this, we provided a price-discrediting cue for half the participants such that they would not associate high price with a favorable experience or a low price with an unfavorable experience. When no such discrediting cue was provided, we expected to replicate the effects in study 1. However, when the discrediting cue was provided, we expected the effect of price on product evaluations to be mitigated.

Method

Design. One hundred fifty-five undergraduates participated. The study employed a 2 (price: expensive vs. inexpensive) by 2 (information order: before sampling vs. after sampling) by 2 (discrediting cue: present vs. control) between-subjects design.

FIGURE 1

STUDY 1: THE EFFECT OF COUNTRY OF ORIGIN BEFORE AND AFTER SAMPLING ON AFFECTIVE EVALUATION



Procedure. The study was conducted on students in two sections of Principles of Marketing with approximately 80 students in each section. Five days before the study was conducted, one section of students was given a lecture about pricing that included a 10-minute discussion of the relationship between price and the evaluation of experiential products. Specifically, the lecture focused on how consumers' evaluations of experiential products, such as wine and chocolate, are often very subjective. As a result, their evaluations are often biased by product information, such as price, even if objectively there is little difference in the experience between high- and low-priced experiential products. The lecture went on to discuss the findings of Goldstein et al. (2008), which examined over 6,000 wine tastings and found almost no relationship between the price of wine and people's enjoyment in blind taste tests. Thus, the lecture provided the students with a price discrediting cue for the main study that was conducted 5 days later (discrediting cue present conditions). The other section was administered a pricing lecture that did not include a discussion of the relationship between price and the evaluation of experiential products (discrediting cue control conditions).

The procedure and cover story for the main study were similar to that of the previous one. The sampled product was the same chocolate from study 1. Respondents in the before-sampling information order condition were instructed that the bar of chocolate was priced at either \$1.50 (inexpensive price condition) or \$15.00 (expensive price condition) prior to sampling the chocolate. The remaining participants sampled the chocolate prior to being given the pricing information (after-sampling information order con-

dition). All participants responded to the evaluation measure, before completing a manipulation check of the discrediting cue manipulation.

Measures. Participants' evaluation ($\alpha = .95$) was measured on the same scale as that of study 1. As a manipulation check for the discrediting cue manipulation, respondents indicated their beliefs about how appropriate they felt price was for evaluating chocolate on a two-item 7-point Beliefs scale ("irrelevant" vs. "relevant"; "inappropriate" vs. "appropriate"; $r = .65$).

Results

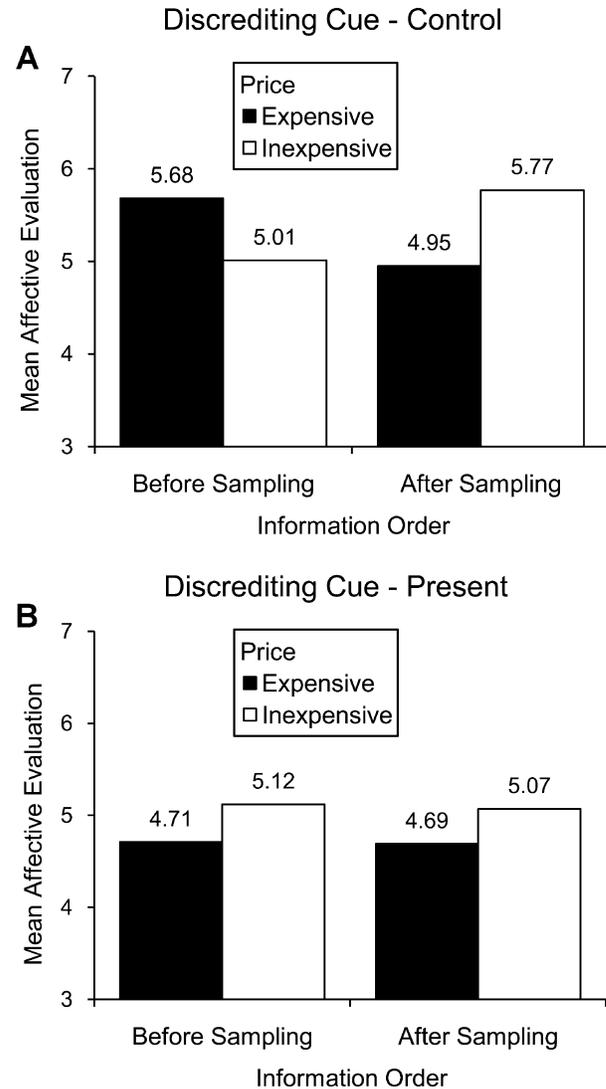
Manipulation Check. We assessed the validity of the discrediting cue manipulation using ANOVA with beliefs as the dependent variable, and price, information order, and discrediting cue as the independent factors. The results confirmed the validity of our manipulation. As expected, there was a main effect of discrediting cue, such that those in the discrediting cue-present condition believe that price was less appropriate for evaluating chocolate than those in the control condition ($M_{pre} = 4.43, M_{con} = 5.12; F(1, 147) = 9.63; p < .01$); no other effects in the model were significant ($F < 1$).

Evaluation. We tested our main prediction using ANCOVA with evaluation as the dependent variable, and price, information order, and discrediting cue as the independent factors. We included the time since the last meal as a covariate since the marketing sections were held at different times of the day (one before lunch and one in the afternoon), so it was possible that participants in one section were hungrier than those in another section. The main effects of price ($F(1, 146) = 1.36, NS$) and information order were insignificant ($F(1, 146) = .01, NS$). The price \times information order \times discrediting cue interaction effect on evaluation was significant ($F(1, 146) = 3.77; p = .05$; see fig. 2). The results in the control conditions were consistent with those in the previous study; when the price was provided before sampling the chocolate, evaluation was marginally higher when they were told that the chocolate was expensive ($M_{exp} = 5.68, M_{inexp} = 5.01; F(1, 146) = 3.25; p < .10, r = .15$), but when the price was provided after sampling the chocolate, evaluation was lower when they were told that the chocolate was expensive ($M_{exp} = 4.95, M_{inexp} = 5.77; F(1, 146) = 4.75; p < .05, r = .18$). In the discrediting cue present conditions, the price had no effect on evaluation when it was presented before sampling ($M_{exp} = 4.71, M_{inexp} = 5.12; F < 1$) or after sampling the chocolate ($M_{exp} = 4.69, M_{inexp} = 5.07; F < 1$). Thus, when the association between price and the product experience was weakened, the effects no longer emerged.

Discussion

The findings of the second study provide additional evidence for our theory using different product information (i.e., price). We also showed that the effects can be mitigated by weakening the association between the product information and information held in memory regarding the prod-

FIGURE 2
STUDY 2: THE EFFECT OF PRICE BEFORE AND AFTER SAMPLING CHOCOLATE



uct experience. In so doing, we demonstrated that it is not the product information per se but rather the cognitions associated with the product information in memory that produce the effects.

STUDY 3

The primary objective of study 3 was to link our findings to actual consumption behavior. This was accomplished by having participants sample chocolate before or after receiving product information and then giving them the chance to choose a bar of the chocolate or a gift card for partici-

pating in the study. We expected their choices to be consistent with the results of previous studies such that more people would choose the bar of chocolate when they sampled the Swiss (vs. Chinese) chocolate when the information was provided before sampling, but the opposite pattern would emerge when the information was presented after sampling. To ensure that affective evaluations mediate our findings, half of the participants indicated how much they enjoyed the chocolate prior to making their choice. The remaining participants made their choice without evaluating the chocolate beforehand.

A second objective was to provide evidence that our results in the after-sampling conditions are due to a contrast effect. According to Mussweiler (2003), contrast effects are often the result of a selective hypothesis testing process where people focus on the dissimilarities between a target and the standard. Importantly, when individuals engage in dissimilarity testing, the focus on dissimilarities carries over to subsequent comparisons, even if they are unrelated to the initial task (Mussweiler 2001; Smeesters, Mussweiler, and Mandel 2010). Thus, we adopted a procedure from previous research (Mussweiler, Rüter, and Epstude 2004) where we had people compare two pictures (after participating in the main study) that were unrelated to the main study. If the results in the information after conditions are due to a contrast effect, then participants should judge the pictures to be more dissimilar when the information is presented after sampling compared to when it is presented before sampling.

Method

Design. One hundred fifty-seven undergraduates participated. The study employed a 2 (country of origin: Switzerland vs. China) by 2 (information order: before sampling vs. after sampling) by 2 (evaluation: present vs. none) between-subjects design.

Procedure. The cover story in this study was modified from that of previous studies to strengthen the believability of choice measure. Participants were instructed that we were working on a project pertaining to the introduction of a new brand of chocolate and that for their assistance the company conducting the study would provide them with a small gift for participating. They were then given two unbranded squares of chocolate to sample and a survey to complete. All subjects were told to read the instructions carefully before sampling the chocolate. In the before-sampling conditions, respondents were informed that the company conducting the study was the LWA Chocolate Company located in Switzerland (China) and told to sample the chocolate. In the after-sampling conditions, respondents were first instructed to sample the chocolate. On the next page of the survey, they were told that the company conducting the study was the LWA Chocolate Company located in Switzerland (China). Respondents in the evaluation-present conditions then indicated how much they liked the chocolate on the same scales as those of the previous studies ($\alpha = .97$). Following the affective evaluation, participants were

informed that the company is giving them a choice of either a bar of the chocolate that they sampled or a gift card that could be used on campus worth the same amount of money. Respondents in the evaluation-none conditions were told that the company is giving them a choice between a bar of the chocolate and a gift card, but were not administered the evaluation measure prior to choice.

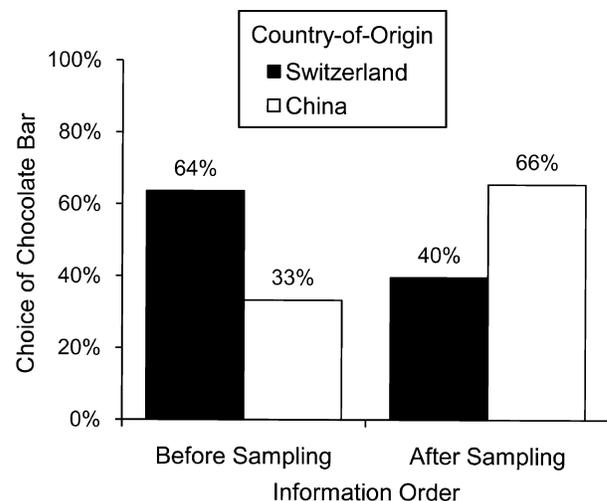
After completing the choice task, all participants were then administered a separate, supposedly unrelated, study that was designed to measure dissimilarity focus. The procedure and stimuli were adopted from research by Mussweiler et al. (2004). Specifically, participants were told that the purpose of the study was to pretest two pictures that would be used in a future study on visual perception. Participants were asked to carefully inspect each picture. The pictures were sketches of two scenes: one depicting a woman leaning over a table with a Christmas tree in the back and the second depicting a man reaching for a bowl. After comparing the two scenes, participants were asked to indicate how similar they perceived the two scenes to be (1 = "not at all similar" and 9 = "completely similar").

Results

Choice. We tested our prediction using logistic regression with choice as the dependent variable, and country of origin, information order, and their interactions at the independent variables. The effects of country of origin ($\beta = .05$; $\chi^2(1) = .08$, NS) and information order on choice were insignificant ($\beta = -.09$; $\chi^2(1) = .27$; NS). The country of origin \times information order interaction effect on choice was significant ($\beta = .87$; $\chi^2(1) = 11.48$; $p = .001$; see fig. 3). As expected, when the country of origin was presented be-

FIGURE 3

STUDY 3: THE EFFECT OF COUNTRY OF ORIGIN BEFORE AND AFTER SAMPLING ON CHOICE



fore sampling, people were more likely to select the bar of chocolate when they were told that it was from Switzerland (63.6%) compared to when they were told that it was from China (33.3%; $\chi^2(1) = 5.58$; $p < .05$, $\Phi = .26$). When the country of origin was presented after sampling, people were less likely to select the bar of chocolate when they were told that it was from Switzerland (39.6%) compared to when they were told that it was from China (65.5%; $\chi^2(1) = 4.73$; $p < .05$, $\Phi = .25$). A separate logistic regression with evaluation (present vs. none) and its interactions added to the current analysis did not produce a significant three-way interaction ($\chi^2(1) = .88$; NS). Thus, evaluating the chocolate first (vs. not evaluating it) did not affect choice.

Evaluation. We examined evaluations in the evaluation-present conditions using ANOVA, with evaluation as the dependent variable, and country of origin and information order as the independent factors. The main effects of country of origin ($F(1, 82) = .26$, NS) and information order were insignificant ($F(1, 82) = .01$, NS). The country of origin \times information order interaction effect on evaluation was significant ($F(1, 82) = 13.92$; $p < .001$). As in study 1, evaluation was higher when participants were told that the chocolate was from Switzerland before sampling ($M_{Sw} = 6.04$, $M_{Ch} = 5.07$; $F(1, 82) = 5.33$; $p < .05$, $r = .25$), but when the country of origin was provided after sampling the chocolate, evaluation was lower when they were informed that the chocolate was from Switzerland ($M_{Sw} = 4.90$, $M_{Ch} = 6.18$; $F(1, 82) = 8.76$; $p < .01$, $r = .31$).

Mediation. We conducted a test for mediated moderation (Muller, Judd, and Yzerbyt 2005) to establish evaluation as a mediator of the country of origin \times information order interaction on choice in the evaluation-present conditions. A logistic regression with choice as the dependent variable and country of origin, information order, and their interaction as the independent variables demonstrates a significant country of origin \times information order interaction on choice ($\beta = .87$; $\chi^2(1) = 11.48$; $p = .001$). A regression analysis with evaluation as the dependent variable and country of origin, information order, and their interaction as the independent variables demonstrates a significant country of origin \times information order interaction on evaluation ($\beta = .57$; $t = 3.73$; $p < .001$). Adding evaluation and the interaction between evaluation and information order to the first model reveals a significant effect of evaluation on choice ($\beta = 1.29$; Wald's $\chi^2 = 17.30$; $p < .001$) and the magnitude of the country of origin \times information order interaction was reduced from $\beta = .87$ ($\chi^2(1) = 11.48$; $p = .001$) to $\beta = .52$ (Wald's $\chi^2 = 2.74$; $p = .10$; Sobel $z = 1.86$; $p < .10$). Thus, evaluation partially mediates the country of origin \times information order interaction effect on choice.

Similarity. We tested whether presenting information after sampling led consumers to engage in dissimilarity testing by examining how dissimilar they perceived the two unrelated pictures to be. This was performed using ANOVA with country of origin and information order as the inde-

pendent factors. The country of origin \times information order interaction effect was not significant ($F(1, 153) = .35$, NS). However, the main effect of Information Order was significant ($F(1, 153) = 13.67$; $p < .001$). As expected, participants perceived the two pictures to be less similar when they received product information after sampling ($M = 4.53$) than when they received the same product information before sampling ($M = 5.39$).

Discussion

The results of the third study replicate the findings in previous studies using actual consumption behavior. Importantly, by demonstrating that product information presented after sampling influences actual behavior, we can conclude that the contrast effect does not simply change how consumers respond on the evaluation measures but changes their absolute opinion of the product (Chakravarti, Lynch, and Mitra 1991). We also demonstrate that product choice is mediated by consumers' affective evaluations. An important objective of this study was to demonstrate that the results in the after-sampling conditions are due to a contrast effect. Consistent with previous findings (Mussweiler et al. 2004), we show that when product information is received after sampling, participants are more focused on dissimilarities than those that received information prior to sampling. Thus, we provide evidence for the selective hypothesis testing process that underlies contrast effects in judgment.

STUDY 4

The fourth study has two objectives. First, we wanted to test whether our findings would generalize to a different product context. Second, we sought to enhance the managerial applicability of our results by examining the effect of product information in a real world setting. To accomplish this, we conducted a field study in a liquor store where customers participated in a blind wine tasting. After tasting the wine, they were told that the wine had a favorable or unfavorable country of origin. Thus, we only examined the effect of product information after sampling in this study. We selected country of origin as the product information based on research that suggests that consumers often base their evaluation of wine on its country of origin (Gergaud and Livat 2007). We selected Italy and India because a pre-test conducted on MBA students found that wine from Italy had a favorable reputation, whereas wine from India had an unfavorable reputation. Moreover, we selected India to enhance the managerial implications of the study since the country is an emerging wine region (Sengupta 2007). Consistent with our previous findings, we expected customers to give more favorable evaluations of and be more likely to purchase the same wine when they were told, after sampling, that it was from India compared to when they were told that it was from Italy.

Method

Design. Sixty-four customers (21–72 years of age) at a northeastern liquor store participated in the field study. The study employed a single factor (country of origin: Italy vs. India) between-subjects design.

Procedure. Participants were recruited to participate in a blind tasting of a new wine that was being introduced and were informed that the retailer was interested in their opinion of the wine. The wine that was tasted was an Italian red wine blend that was pretested to be ambiguous in terms of taste. During the tasting, the wine was poured out of a carafe so that participants could not see the label. After tasting the wine, participants were asked to fill out a “satisfaction survey” at a desk located in the tasting room. At the top of the survey, participants were informed that the wine they had just tasted was a new wine from “IW Vineyards located in Italy (India).” They were then asked a few brief questions to measure enjoyment and some basic demographic questions. After completing the survey, respondents were brought into an adjacent room individually and instructed that, as a gift for participating, they could choose between a \$5 off coupon that could be used to purchase the wine at its regular price of \$15.99 or a wine opener valued at \$5. We selected a wine at this price point based on the retailer’s estimate that it was the average price of the wines that are regularly tasted in the store. After making their choice, participants were debriefed and given a \$5 coupon that could be used on anything in the store.

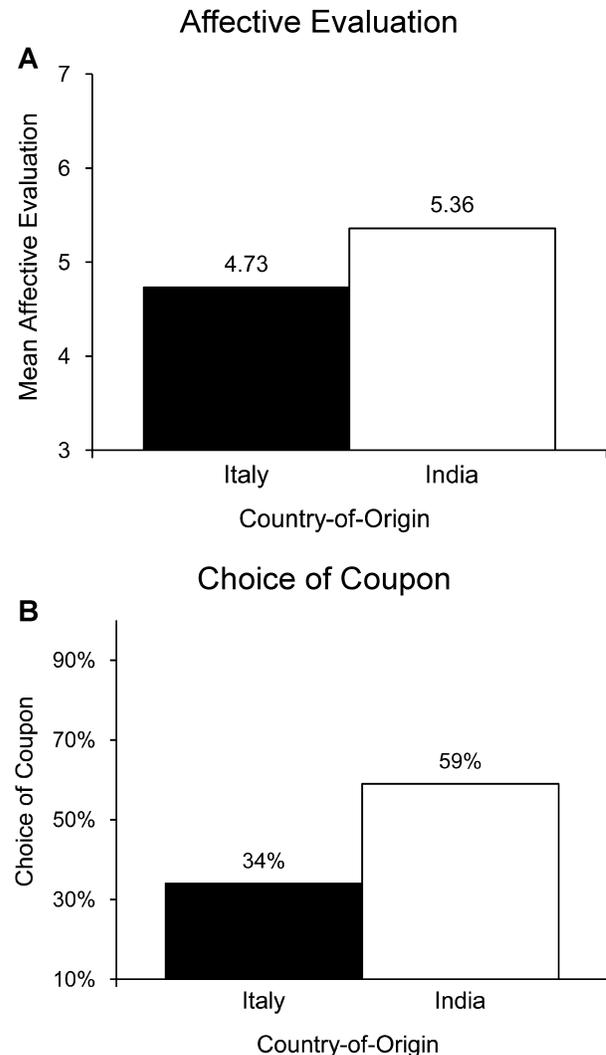
Measures. To alleviate the store owner’s concerns about asking their customers too many questions, Evaluation was measured on a reduced two-item 7-point scale (“dislike” vs. “like”; “not enjoyable” vs. “enjoyable”; $r = .89$). Choice was used as a measure of purchase intent, coded at 0 if they selected the wine opener or 1 if they selected the coupon.

Results

We tested our evaluation prediction using ANOVA with country of origin as the single factor. As expected, evaluation was lower when participants were told that the wine was from Italy compared to when they were told that it was from India ($M_{It} = 4.73$, $M_{Ind} = 5.36$; $F(1, 62) = 5.49$; $p < .05$; $r = .29$; see fig. 4). Importantly, logistic regression revealed that country of origin (0 = India and 1 = Italy) had a significant negative effect on purchase intent ($\beta = -1.03$; $\chi^2(1) = 3.93$; $p < .05$; $\Phi = .25$; see fig. 4); participants were less likely to select the \$5 coupon when they were told it was from Italy (34%) compared to when they were told that it was from India (59%). Mediation analysis revealed that evaluation fully mediated the effect of country of origin on purchase intent. Specifically, evaluation had a significant effect on purchase intent ($\beta = .88$; $\chi^2(1) = 8.96$; $p < .01$). Once evaluation was controlled for in the regression of country of origin on purchase intent, country of origin was no longer significant ($\beta = -.69$; $\chi^2(1) = 1.54$, NS; Sobel $z = 2.04$; $p < .05$).

FIGURE 4

STUDY 4: THE EFFECT OF COUNTRY OF ORIGIN AFTER SAMPLING WINE



GENERAL DISCUSSION

This research sheds light on how the order in which consumers are exposed to information about an experiential product affects their evaluation. Consistent with past research (e.g., Plassmann et al. 2008), we demonstrate that when information (e.g., country of origin, price) is presented prior to the consumption of an experiential product (e.g., chocolate), the information has an assimilation effect on consumers’ evaluation of a product experience such that consumers like the same experience more when the product information is favorable compared to when it is unfavorable (studies 1, 2, and 3). More interestingly, however, we also show that when such information is presented after con-

sumption, it results in a contrast effect such that consumers like the same product less when the product information is favorable compared to when it is unfavorable (studies 1–4). Additionally, we demonstrate that the effects can be minimized by weakening the association between the product information and beliefs about the product experience (study 2), which shows that it is not the product information itself that produces the effects but rather the beliefs regarding the product experience. Further, we demonstrate the robustness of the effects by demonstrating its effect on actual consumption behavior (studies 3 and 4).

Previous research has examined how the order of information—before or after trial—affects quality judgments (Braun 1999; Braun-LaTour and LaTour 2005; Hoch and Ha 1986; Levin and Gaeth 1988). These findings demonstrate that when positive information is presented after trial, it often has a positive (assimilation) effect on judgments of quality. Thus, a natural question that emerges is why does information presented after trial have an assimilation effect on quality judgments but a contrast effect on affective evaluations? One possibility is that previous research has focused on the role of positive information on evaluation, whereas our research explores the role of positive and negative information. Thus, it is possible that negative information is more likely to have a contrast on judgment. A second explanation is based on the nature of the two types of judgment explored. One of the key differences between affective evaluations and quality judgments is how the two are formulated. Affective evaluations arise automatically from the sampling experience, whereas quality judgments are more cognitive in nature. When consumers sample an experiential product, they are likely to immediately judge how much they liked it, but thoughts about the product's quality may emerge in a more deliberate, cognitive manner. Thus, when product information is presented after trial, consumers are likely to form an initial affective evaluation before receiving the information, making the subsequent information distinct, but they are less likely to spontaneously judge quality before receiving the product information; this may occur because they withhold their quality judgment until they receive additional information or because they do not assess product quality in the absence of product information to cue thoughts about quality. If consumers do not initially evaluate quality upon sampling, information about the product's price or country of origin may become incorporated into consumers' evaluation when they are subsequently asked to judge the product's quality (after the information has been presented). Thus, the automatic nature of affective judgments makes subsequent product information distinct from the experience, resulting in a contrast effect. However, the deliberative nature of quality judgments may make subsequent product information indistinct from the experience, resulting in an assimilation effect.

Nevertheless, because comparing affective versus quality evaluations was not the focus of our research, future studies are needed to fully investigate the differences between the two types of judgments to better understand when product

information learned after trial results in assimilation or contrast. For instance, the differences could be due to emotion-based evaluations being more persistent than cognition-based judgments. Alternatively, one could argue that affective evaluations are more ambiguous than quality evaluations, which could explain differences in how people respond to information presented after a sampling experience. Future research may also want to examine whether prompting people to withhold or provide a specific type of evaluation could lead to assimilation or contrast. In all of our studies, participants were not explicitly told that they would be receiving additional product information after sampling the product. It would be interesting to see whether telling them that more information will be received would lead them to withhold their affective judgment and result in an assimilation effect. Additionally, research may want to examine whether prompting people to evaluate product quality while sampling an experiential product would lead product information to have a contrast effect on quality judgments. Finally, our findings suggest that the same sampling experience may lead to both assimilation and contrast, which would be worth exploring in future research. People may enjoy an experiential product more when they receive unfavorable product information after sampling (due to contrast) but still judge it to be of higher quality (due to assimilation).

Our results build on the work of Braun-LaTour and LaTour (2005) who examined the effect of advertising presented before or after sampling on the evaluation of orange juice. They also manipulated the length of time between sampling and viewing the ad to investigate the effect of memory on quality evaluations. They found that regardless of when an ad was shown, the ad increased quality evaluations; however, when information was presented after sampling, it had a greater effect on evaluation when there was a delay between its presentation and the product sampling compared to when the information was presented immediately after sampling. Future studies may want to examine the role on memory in affective judgments when information is presented after trial. It is possible that a delay between the trial and the presentation of the product information may increase perceptions of distinctness and strengthen the contrast effect. However, it is also possible that the delay may lead information to bias the recall of the initial affective evaluation and result in an assimilation effect.

Our results also complement the findings of Lee, Frederick, and Ariely (2006), who found that presenting unfavorable information about beer (the addition of few drops of balsamic vinegar) prior to sampling reduces preference for it compared to presenting such information after the consumption experience. The authors of that study found that learning the information after sampling did not alter preference compared to not knowing such information. Consistent with their findings, when we manipulate the extrinsic information that is presented to consumers, we find that unfavorable information leads to more negative evaluations when such information is presented before sampling than after sampling. However, we demonstrate that presenting

unfavorable extrinsic information after sampling can increase preference. This suggests that the contrast effect may only emerge when extrinsic product information is presented after sampling and that information related to the intrinsic product quality may not be distinct enough to serve as a comparison standard. Additionally, affect may play less of a role in the evaluation of beer in the same way that it does in the evaluation of wine or chocolate, so consumers may not spontaneously form an initial affective evaluation or it may be less salient during sampling.

Although we argue that spontaneous affective evaluations that emerge during trial make information presented after sampling distinct, we acknowledge a potential alternative explanation for the contrast effect demonstrated. It is possible that there is a difference in how information is interpreted when it is learned before or after an experience. Information learned before an experience may be interpreted broadly, making it more likely to have an assimilation effect on judgment. Information learned after an experience may be interpreted more narrowly, making it more likely to serve as a comparison standard resulting in a contrast effect. Future research that specifically focuses on how people perceive information learned before or after sampling an experiential product is necessary to examine this possibility.

Finally, these results have important implications for managers that are actively engaged in sampling programs in a host of experiential categories ranging from food and beverage, to videos, music, and perfumes. More specifically, our results suggest that for high-end products it is important to convey favorable product information (e.g., price, brand, country of origin) prior to consumers sampling the merchandise. The reverse would be preferable for products that have less favorable cues. For example, when launching an experiential product from a country with an unfavorable reputation (e.g., a wonderful tasting chocolate made in China), presenting the country of origin after sampling may be the best strategy.

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