Consumer Responses to Variety in Product Bundles:
The Moderating Role of Evaluation Mode

Xia Wang
PhD Candidate, Department of Marketing, Guanghua School of Management
Peking University, Beijing 100871, P.R. China.
Phone: (86-10) 5276-4172; E-mail: wangxia1@gsm.pku.edu.cn

Luping Sun
PhD Candidate, Department of Marketing, Guanghua School of Management
Peking University, Beijing 100871, P.R. China.
Phone: (86-10) 5276-4172; E-mail: sunluping@gsm.pku.edu.cn

Hean Tat Keh*
Professor of Marketing, Department of Marketing, Faculty of Business and Economics
Monash University, PO Box 197, Caulfield, VIC 3145, Australia.
Phone: (61-3) 9903-1155; E-mail: ht.keh@monash.edu

* Corresponding author. The authors are listed in reverse alphabetical order, and all authors contributed equally. We are grateful to the guest editor (Marnik Dekimpe), associate editor (Tom Meyvis), and reviewers for their encouragement and helpful feedback.
Consumer Responses to Variety in Product Bundles:
The Moderating Role of Evaluation Mode

ABSTRACT

This article examines the moderating effect of evaluation mode on consumer responses to variety in product bundles. Study 1 finds that consumer preference for the variety bundle (relative to the non-variety bundle) is higher in the joint evaluation mode than in the separate evaluation mode. Study 2 provides evidence that the increased preference for the variety bundle in joint evaluation is driven by the activation of concerns about satiation. Specifically, we find that both the quantity of items in and the category of the non-variety bundle influence consumer concern for satiation and the evaluation of the variety bundle. Study 3 further examines the proposed mechanism by manipulating the information associated with repetition and finds that associating repetition with loyalty (vs. satiation) eliminates the moderating effect of evaluation mode on the preference for variety. We discuss the findings and their implications for marketers.

Keywords: Variety; Product bundles; Evaluation mode; Satiation.
1. Introduction

During planned shopping trips (as opposed to impulse purchases), consumers often buy more than one unit of a given product category, particularly for convenience goods that have to be replenished frequently (e.g., snacks and yogurt). Correspondingly, manufacturers and retailers see the benefit of bundling multiple units of the product into a single package to facilitate consumer purchases (Dempsey, 1959; Simonson, 1999). In so doing, a key decision pertains to whether manufacturers and retailers should offer non-variety bundles (e.g., six cups of yogurt that all have the same flavor) or variety bundles (e.g., six cups of yogurt where each comes in a different flavor).

The variety-seeking literature informs us that consumers are generally motivated to seek variety to increase stimulation, reduce satiety, and withstand future uncertainty (Kahn, 1995; McAlister & Pessemier, 1982; Simonson, 1990). In particular, research on diversification bias suggests that when people have to make simultaneous choices for future consumption (e.g., choose now which of six snacks to consume in the next four weeks), they tend to seek more variety than when they make sequential choices (e.g., choose once a week which of six snacks to consume that week for four weeks) or separate choices immediately preceding consumption (Read & Loewenstein, 1995; Simonson, 1990). Thus, in practice, it is not surprising to find that manufacturers and retailers often endow product bundles with some variety (Anonymous, 2006; Howell, 2000).

However, from the consumer’s perspective, there is also a potential downside of choosing the product bundle with variety; by definition, the bundle with variety implies that consumers would have fewer quantities of their most-preferred items and need to compromise on the less favorable ones. Given both the potential benefit and downside, we are interested in
understanding how consumers evaluate and respond to variety in product bundles. As consumers’ variety-seeking behavior is usually influenced by contextual factors (e.g., Ratner & Kahn, 2002), we adopt the context-dependent approach to understand their evaluation of variety in product bundles. In particular, we examine one of the most common contexts for bundle evaluation—the evaluation mode. When the bundle with variety is evaluated by itself (i.e., separate evaluation), the presence of variety merely implies the aggregation of different items, and consumers’ evaluation of the bundle would depend on their average preference for the various items in the bundle. However, when the bundles with and without variety are evaluated simultaneously (i.e., joint evaluation), we posit that the direct comparison will activate consumers’ concern for satiation in the non-variety bundle, making the variety bundle more desirable. That is, the absence (vs. the presence) of the non-variety bundle may contextually influence the value derived from the variety bundle. To examine this proposition, we conduct three studies to test the moderating effect of evaluation mode on consumers’ preference for variety and the underlying mechanism of their concern for satiation. Exploring this issue will not only enrich our understanding of consumer responses to variety in product bundles, but also provide relevant insights for manufacturers and retailers to improve the marketing of these bundles.

The rest of the paper is organized as follows. We first review the relevant literature and develop the hypotheses. Then, we conduct three studies to test our hypotheses. Finally, we discuss the theoretical and managerial implications of our findings.

2. Theoretical background

2.1. Satiation and variety seeking
Past research shows that variety seeking, either as an inherent or context-motivated tendency, can influence consumer choices (Kahn, 1995; McAlister & Pessemier, 1982; Simonson, 1990). A fundamental motivation for consumers to seek variety is to avoid the satiation that comes from repeated consumption of an item (McAlister, 1982). Because consumers quickly become satiated with the attributes of a product, they desire products or experiences that offer a range of other attributes. Thus, switching among the choice alternatives allows consumers to reduce satiation. Other benefits that derive from variety seeking include enhancing stimulation (Galak, Redden, & Kruger, 2009; Inman, 2001), augmenting freedom and flexibility (Mogilner, Rudnick, & Iyengar, 2008), magnifying anticipated enjoyment (Kahn & Wansink, 2004), leaving a favorable and interesting memory (Ratner, Kahn, & Kahneman, 1999), and delivering a unique or interesting impression (Ratner & Kahn, 2002). Consequently, consumers are willing to tolerate less-preferred items for the sake of variety (Ratner et al., 1999).

In particular, variety seeking is most pronounced for products with hedonic attributes on which individuals quickly satiate (e.g., flavors), rather than non-hedonic attributes (e.g., brands; Inman, 2001). In addition, as consumers have the lay belief that they will satiate on favored items quickly, they tend to incorporate more variety for future consumption in simultaneous choices than in sequential choices (Simonson, 1990). Thus, when consumers think about the satiation that will result from repetition, they show diversification bias by incorporating more variety to counteract the anticipated physiological satiation (Read & Loewenstein, 1995). Notwithstanding these findings, other research indicates that consumers also seek variety in sequential choices (Ratner et al., 1999), given that repetition is associated with boredom and signals closed-mindedness, whereas variety seeking prevents satiation and signals open-mindedness (Ratner & Kahn, 2002).
Rather than being an inherent and stable physiological process, satiation can be constructed in the moment. For example, the memory of past consumption plays an important role in determining satiation (Redden & Galak, 2013). Specifically, recalling the variety in past consumption is helpful in accelerating the recovery from satiation (Galak et al., 2009). Furthermore, variety-seeking behaviors can even be triggered unconsciously by situational cues that activate the satiation-based (vs. preference-based) construal of the choice (Fishbach, Ratner, & Zhang, 2011).

Although variety is an important consideration when consumers make product choices (Kahn, 1995), the literature has little to say about how consumers evaluate variety in product bundles. Exploring this issue from the consumer’s perspective will extend our understanding about the value of variety in product bundles, as influenced by the anticipated satiation for bundle consumption. In addition, prior research finds that variety-seeking behavior is generally context dependent. For example, positive consumer mood (Kahn & Isen, 1993), public (vs. private) consumption occasion (Ratner & Kahn, 2002), and even irrelevant varied arrays (Maimaran & Wheeler, 2008) can influence individuals’ desire for variety. Accordingly, the current research seeks to examine whether consumers’ responses to variety in product bundles vary across different evaluation modes that have the potential to influence the construction of satiation.

2.2. Two modes of evaluation

According to Hsee (1996; 2000), all judgments and decisions are made in one of two basic modes—joint evaluation (JE) mode and separate evaluation (SE) mode. In the former condition, consumers are exposed to multiple objects simultaneously and evaluate these objects
comparatively, while in the latter condition, they are exposed to only one object at a time and evaluate it in isolation. Thus, direct comparison is available only in the JE mode, which facilitates comparison of attributes that are intrinsically difficult to evaluate. Prior research indicates that the salience of product attributes would be quite different in the two evaluation modes; the easy-to-evaluate attributes are more salient in the SE mode, while the hard-to-evaluate attributes are more salient in the JE mode (Hsee, 2000; Kahneman & Thaler, 2006). Consequently, consumer preferences could be different or even reversed under different evaluation modes (for a review, see Hsee, Loewenstein, Blount, & Bazerman, 1999).

In this research, we extend the application of the evaluation mode to study consumer responses to variety in product bundles. We propose that the contextual factor of evaluation mode has the potential to influence consumers’ in-the-moment construction of satiation and, thus, their subsequent evaluation of variety in product bundles. Specifically, compared to separate evaluation, simultaneous exposure to the variety and non-variety bundles will trigger anticipated satiation for the non-variety bundle, leading consumers to favor the variety bundle. Exploring differential consumer responses to product bundles with and without variety as moderated by the evaluation mode can not only contribute new findings to the literature, but also provide meaningful implications toward marketing practice.

2.3. Present research

We propose that it is difficult for consumers to evaluate the value of variety in product bundles when a reference is unavailable (i.e., in the SE mode). However, when the bundle without variety is displayed alongside that with variety (i.e., in the JE mode), the anticipation of consuming the same items in the non-variety bundle is likely to trigger consumers’ concern for
satiation and induce their preference for the variety bundle to counteract the potential satiation. That is, consumers’ aversion toward satiation from repeated consumption of the same items enhances their motivation to seek variety, which makes the variety bundle more desirable in the JE mode than in the SE mode. We test this central hypothesis in three studies.

Study 1 examines the baseline influence of evaluation mode; that is, whether the presence of variety works better when the variety bundle is displayed by itself or when it is juxtaposed alongside a non-variety bundle. Study 2 explores the mechanism underlying the JE mode by varying the comparison non-variety bundle in terms of the quantity of items it has and its category. Through manipulating the information (satiation vs. loyalty) associated with repetition, study 3 further examines how the concern for satiation acts as a means of influencing the moderating effect of evaluation mode.

3. Study 1: The influence of evaluation mode on consumer responses to variety in product bundles

We propose that, in the SE mode, consumers perceive the product bundle as a combination of the items in it and that the value derived from variety in that bundle is limited. However, in the JE mode, the direct comparison between the variety and non-variety product bundles may activate consumers’ concern for satiation in the non-variety bundle, leading consumers to prefer the variety bundle.

3.1. Design and sample

Experimental design. In study 1, we used bundled potato chips as the stimuli, and conducted a pretest with 30 participants similar in profile to those in the main study to identify
the five most popular flavors of potato chips. Based on the pretest, we developed a pair of stimuli, each containing five small bags of equal weight (i.e., 50 g/bag) that have the same price. The only difference between the two stimuli was the presence versus the absence of variety on the attribute of flavor. Specifically, stimulus A (i.e., the non-variety bundle) had five small bags in the most popular flavor (i.e., BBQ flavor), while stimulus B (i.e., the variety bundle) had five small bags that each came in a different flavor (i.e., BBQ, tomato, original, spicy, and chicken flavors). Then, we designed three conditions to test the effect of evaluation mode—SE for stimulus A, SE for stimulus B, and JE for both stimuli. In the first two conditions, the participants were exposed to only one stimulus (either A or B) and were required to evaluate it. In the third condition, the participants were exposed to both stimuli simultaneously and required to evaluate each of them. The order of the two stimuli was counterbalanced in the third condition.

Sample. Participants were recruited using an online advertisement on the bulletin board system of a large public university and were compensated for their involvement. The final sample had 104 participants (45.2% male, mean age = 22.1 years).

3.2. Procedure and measures

Procedure. The participants were randomly assigned to one of the three conditions. In each condition, they were first exposed to verbal and pictorial descriptions about the stimulus/stimuli, and then asked to indicate their bundle evaluations. Afterwards, they were asked to list any thoughts they had when evaluating the bundle(s). The participants were also asked to indicate their favorability for the flavor(s) they were exposed to and some demographic information. At the end, they were debriefed, compensated, and dismissed.
**Measures.** In this study, we measured consumer evaluations of the product bundles based on bundle favorability and purchase intention. Bundle favorability was measured on a 7-point scale (1 = not at all favorable; 7 = extremely favorable). Purchase intention was measured by the likelihood that the participants would purchase the product bundle, ranging from 0% to 100%. In addition, three items were used to measure perceived variety: “This product gives a lot of variety for me to enjoy,” “This product offers more ways to enjoy it” (for both items: 1 = strongly disagree; 7 = strongly agree), and “How much variety do you think there is in this product?” (1 = very little variety; 7 = very much variety) (Cronbach’s α = .91; Kahn & Wansink, 2004). Consumer favorability for the specific flavor(s) was measured on a 7-point scale (1 = not at all favorable; 7 = extremely favorable).

**3.3. Results and discussion**

We found no significant difference among the three conditions in terms of preference for the BBQ flavor ($F(2, 101) = 1.15, p > .10$). Among the five flavors, BBQ was consistently rated the highest across the three conditions, implying that the non-variety bundle (i.e., BBQ flavor only) should be the optimal choice for consumers. Interestingly, when the variety bundle was evaluated in the SE mode, the participants’ bundle favorability ($M = 3.77$) was lower than their average favorability for the five individual flavors ($M = 4.58^1; F(1, 34) = 20.44, p < .001$). In contrast, when the variety bundle was evaluated in the JE mode, the participants’ bundle favorability ($M = 5.23$) was higher than their average favorability for the five flavors contained in it ($M = 4.70^2; F(1, 34) = 6.02, p < .05$). This finding implied that consumers derived additional

---

1 When the variety bundle was evaluated in the SE mode, the participants’ favorability for each flavor was as follows: $M_{BBQ} = 4.91, M_{tomato} = 4.69, M_{original} = 4.63, M_{spicy} = 4.20$, and $M_{chicken} = 4.46$. The average favorability for the five flavors was $M = 4.58$, which was higher than the bundle favorability ($M = 3.77$).

2 When the variety bundle was evaluated in the JE mode, the participants’ favorability for each flavor was as follows: $M_{BBQ} = 4.98, M_{tomato} = 4.92, M_{original} = 4.87, M_{spicy} = 4.46$, and $M_{chicken} = 4.27$. The average favorability for the five flavors was $M = 4.70$, which was higher than the bundle favorability ($M = 5.23$).
value from variety, beyond the simple combination of different flavors, but only in the JE mode.

As shown in figure 1, in the SE mode, the favorability for the variety bundle was not significantly different from that for the non-variety bundle ($M_{\text{variety}} = 3.77$ vs. $M_{\text{non-variety}} = 3.26$, $t(67) = 1.23, p > .10$). However, in the JE mode, consumers’ favorability for the variety bundle was significantly higher than that for the non-variety bundle ($M_{\text{variety}} = 5.23$ vs. $M_{\text{non-variety}} = 3.27$, $t(34) = 7.65, p < .001$). The difference between the variety bundle and the non-variety bundle on favorability was significantly larger in the JE mode than in the SE mode ($t(101) = 3.40, p < .001$). The results for purchase intention revealed a similar pattern. Specifically, there was no significant difference between the variety bundle and the non-variety bundle in the SE mode ($M_{\text{variety}} = 41.29$ vs. $M_{\text{non-variety}} = 35.91$, $t(67) = .83, p > .10$), while the variety bundle was more likely to be purchased than the non-variety bundle in the JE mode ($M_{\text{variety}} = 67.29$ vs. $M_{\text{non-variety}} = 22.94$, $t(34) = 7.83, p < .001$). Notably, the difference in purchase intention between the variety bundle and the non-variety bundle was significantly larger in the JE mode than in the SE mode ($t(101) = 4.54, p < .001$). Taken together, these results indicated that consumer evaluation of the variety bundle (vs. the non-variety bundle) was moderated by the evaluation mode.

We further explored what led to differential consumer responses toward the two bundles under the two evaluation modes. We found that the participants’ favorability for the non-variety bundle did not differ across the two modes ($M_{\text{SE}} = 3.26$ vs. $M_{\text{JE}} = 3.27$, $F(1, 67) < .001, p > .50$); however, their favorability for the variety bundle was significantly higher in the JE mode ($M_{\text{SE}} = 3.77$ vs. $M_{\text{JE}} = 5.23$, $F(1, 68) = 17.35, p < .001$). More interestingly, compared with the SE mode, the participants’ purchase intention for the non-variety bundle in the JE mode was reduced ($M_{\text{SE}} = 35.91$ vs. $M_{\text{JE}} = 22.94$, $F(1, 67) = 5.39, p < .05$), while that for the variety bundle was increased which was lower than the favorability for the variety bundle ($M = 5.23$).

3 Our analysis followed the procedure in Hsee (1996), whereby the evaluations of the two bundles in the JE condition came from the same participants.
\( M_{SE} = 41.29 \) vs. \( M_{JE} = 67.29, F(1, 68) = 17.16, p < .001 \). Taken together, these results indicated that the primary driver of the moderating effect of evaluation mode was the favorable response toward the variety bundle in the JE mode, which was not apparent in the SE mode.

[Insert figure 1 about here]

We also conducted a content analysis on the participants’ listed thoughts when evaluating the bundle(s). Two marketing doctoral students who were unaware of the research purpose classified the thoughts listed by the participants based on keywords. Specifically, the thoughts on “satiation” or “boring” were indicative of the participants’ concern for satiation. We found that 58% of the participants expressed concern for satiation when evaluating the bundles in the JE mode, which was significantly higher than when the participants separately evaluated either the variety bundle (14%; \( z = 3.26, p < .001 \)) or the non-variety bundle (20%; \( z = 3.12, p < .01 \)). This finding indicated that comparing between the variety and non-variety bundles in the JE mode activated consumers’ concern for satiation, highlighting the role of variety in counteracting potential satiation from the non-variety bundle. Nonetheless, study 1 did not directly examine the underlying mechanism of the concern for satiation, and we conducted study 2 to address this limitation.

### 4. Study 2: How the JE mode helps manifest the value of variety in product bundles

We propose that the concern for satiation triggered by the non-variety bundle leads consumers to appreciate the value of variety in the JE mode. Past research indicates that consumer satiation is mainly induced by repeated consumption of the same items (McAlister, 1982). Consumers anticipate and even overestimate their satiation when considering the same items for future consumption (Read & Loewenstein, 1995). Thus, in study 2, we manipulate
consumer concern for satiation in future consumption by varying the quantity of items in the non-variety bundle. We posit that the non-variety bundle with a small quantity will be less effective in activating satiation and, therefore, be less likely to lead to increased consumer evaluation of the variety bundle in the JE mode. In contrast, when the non-variety bundle has a large quantity of items, the activated satiation will be relatively strong, thus leading to a higher evaluation of the variety bundle. However, we also expect that when satiation is activated by a non-variety bundle from a different (vs. same) category, the value of the variety bundle in counteracting the anticipated satiation will be reduced. Thus, the impact of a large (vs. small) quantity of items in the non-variety bundle on the evaluation of the variety bundle will be weaker when the two bundles are from different categories.

4.1. Design and sample

We used instant coffee as the target stimulus in study 2; the variety bundle contained 12 packs (15 g/pack) of instant coffee, which came in four different flavors (i.e., Latte, Cappuccino, Mocha, and Black coffee). To manipulate the satiation triggered by the non-variety bundles in the JE mode, this study used a 2 (quantity of items in the comparison non-variety bundle: small vs. large) × 2 (product category of the non-variety bundle: coffee vs. cookie) between-subjects design, and we also added a SE condition for the variety bundle as a control. The category of the comparison non-variety bundle was either the same (i.e., coffee) as or different (i.e., cookie) from the variety bundle. In terms of quantity, the small-quantity non-variety bundle had four packs, while the large-quantity non-variety bundle had 12 packs. The packs in each non-variety bundle were identical and came in the most popular flavor based on a pretest (for coffee: Latte flavor; for cookies: chocolate flavor). As the unit price of each pack was controlled to be the
same, the non-variety bundle had the same price as the variety bundle in the large-quantity group, while it was one-third the price of the variety bundle in the small-quantity group.

Sample. A total of 143 college students (59.4% male, mean age = 23.8 years) took part in the study for financial compensation.

4.2. Procedure and measures

Procedure. The participants were randomly assigned to one of the five conditions (i.e., four treatment groups and one control group). The participants in the SE condition first read the verbal and pictorial descriptions of the variety bundle and then were asked to evaluate the bundle in terms of favorability and purchase intention. The participants also indicated their expected satiation of consuming the variety bundle. Finally, they were asked to provide some demographic information. In the four JE conditions, the procedures were similar except that the participants were exposed to the descriptions of two stimuli (i.e., the comparison non-variety bundle and the variety bundle) simultaneously. Then, the participants were asked to indicate their evaluations and expected satiation for both the non-variety bundle and the variety bundle. At the end, they were debriefed, compensated, and dismissed.

Measures. We used the same measures for consumer favorability and purchase intention as in study 1. In addition, three items based on 7-point scales were used to measure the participants’ anticipated satiation (Cronbach’s $\alpha = .72$): how enjoyable they expect it to be when consuming the bundle (1 = I would hate it; 7 = I would love it; reverse coded) (Galak, Kruger, & Loewenstein, 2011); how bored they expect to be after consuming the bundle (1 = not at all bored; 7 = extremely bored); and when they would like to consume the product again (after consuming the bundle) (1 = right now; 7 = not for a while) (Redden & Galak, 2013).
4.3. Results and discussion

We ran a two-way ANOVA for the four treatment groups and found that the participants’ evaluation of the variety bundle was significantly affected by the quantity of repetitive items in the comparison bundle (for favorability: $F(1, 112) = 8.91, p < .01$; for purchase intention: $F(1, 112) = 14.34, p < .001$). Specifically, their evaluation of the variety bundle was higher when it was juxtaposed against a bundle with a large quantity (i.e., 12 packs) than against a bundle with a small quantity (i.e., four packs) of items (for favorability: $M_{\text{small}} = 4.79$ vs. $M_{\text{large}} = 5.44$; for purchase intention: $M_{\text{small}} = 45.83$ vs. $M_{\text{large}} = 61.76$). In addition, the category of the comparison bundle also had a significant impact on the participants’ evaluation of the variety bundle (for favorability: $F(1, 112) = 5.29, p < .05$; for purchase intention: $F(1, 112) = 7.89, p < .01$). In particular, the participants gave a higher evaluation of the variety bundle when it was evaluated side-by-side against a non-variety bundle from the same category than that from a different category (for favorability: $M_{\text{same}} = 5.36$ vs. $M_{\text{different}} = 4.87$; for purchase intention: $M_{\text{same}} = 59.71$ vs. $M_{\text{different}} = 47.88$).

More importantly, the participants’ evaluation of the variety bundle was more susceptible to the quantity of items in the non-variety bundle when the two bundles came from the same category (for favorability: $M_{\text{small}} = 4.85$ vs. $M_{\text{large}} = 5.86$, $F(1, 57) = 12.68, p < .001$; for purchase intention: $M_{\text{small}} = 47.22$ vs. $M_{\text{large}} = 72.19$, $F(1, 57) = 27.28, p < .001$) than when they came from different categories (for favorability: $M_{\text{small}} = 4.73$ vs. $M_{\text{large}} = 5.00$, $F(1, 55) = .68, p > .40$; for purchase intention: $M_{\text{small}} = 44.43$ vs. $M_{\text{large}} = 51.33$, $F(1, 55) = .98, p > .30$) (as shown in figure 2). The interaction between quantity and category was marginally significant for bundle favorability ($F(1, 112) = 3.07, p = .08$) and significant for purchase intention ($F(1, 112) = 4.61, p$
< .05). This finding supports our conjecture that the variety bundle is less effective in counteracting anticipated satiation of a non-variety bundle from a different category and is consistent with previous research showing that recalling the variety of items one had in the past accelerates recovery from satiation only when these items belong to the same category as the satiated item (Galak et al., 2009).

Bonferroni post hoc tests for the four treatment groups showed that the participants’ evaluation of the variety bundle in the large-quantity/same-category comparison condition was significantly higher than the evaluations in the other three conditions (for favorability: $p < .01$; for purchase intention: $p < .001$), while the evaluations of the variety bundle in the other three conditions were not significantly different from each other (for both favorability and purchase intention: $p > .10$). This finding indicates that the interaction effect between quantity and category was mainly driven by the higher evaluation of the variety bundle in the large-quantity/same-category comparison condition. In addition, we compared the control group (i.e., SE condition for the variety bundle) with the four treatment groups and found significant differences for two of the treatment groups. In particular, the participants’ evaluation of the variety bundle in the SE mode (for favorability: $M = 4.44$; for purchase intention: $M = 40.81$) was marginally lower than that in the large-quantity/different-category comparison condition (for favorability: $M = 5.00$, $p = .08$; for purchase intention: $M = 51.33$, $p = .08$) and significantly lower than that in the large-quantity/same-category comparison condition (for favorability: $M = 5.88$, $p < .001$; for purchase intention: $M = 72.19$, $p < .001$). This result implies that a large quantity of items in the non-variety bundle drives consumers’ concern for satiation and leads them to evaluate the variety bundle more favorably, particularly when the non-variety bundle is from the same category as the variety bundle.
To further verify the underlying mechanism of concern for satiation, we conducted a mediated moderation test. We expect the interaction between quantity and category on the evaluation of the variety bundle to be mediated by the satiation manifested in the JE mode. We first constructed a satiation measure (i.e., “resultant satiation”) by subtracting the anticipated satiation related to the variety bundle from that activated by the non-variety bundle. The resultant satiation not only changed with the variation of satiation activated by the non-variety bundle, but also reflected the degree of satiation that could be counteracted by the variety bundle. We performed the mediated moderation analysis following the procedure by Hayes (2012) and found that when the resultant satiation was controlled in the two-way ANOVA, the interaction between quantity and category was eliminated (for favorability: $F(1, 111) = .39, p > .50$; for purchase intention: $F(1, 111) = 1.06, p > .30$). Bootstrapping tests (Hayes, 2012; Preacher & Hayes, 2004) revealed that the interaction between the quantity of items in and the category of the comparison non-variety bundle was significantly mediated by the resultant satiation (for favorability: $\beta = .52$, lower 95% CI = .13, upper 95% CI = 1.04; for purchase intention: $\beta = 10.41$, lower 95% CI = 2.23, upper 95% CI = 21.45).

These findings are helpful in understanding how consumer evaluation of the variety bundle in the JE mode is influenced by the comparison non-variety bundle. That is, owing to consumer concern for satiation elicited by the non-variety bundle, the value of variety in counteracting potential satiation is manifested in the JE mode, leading consumers to favor the variety bundle. Nonetheless, study 2 focused on the JE mode and did not directly examine how the moderating effect of evaluation mode varied with the activated satiation. Furthermore, in study 2, the manipulation of the activated satiation in the non-variety bundles might
simultaneously alter other unobserved variables in addition to satiation. Finally, in both study 1 and study 2, the items in the non-variety bundles came in the most popular flavor but might not be the most preferred flavor for each individual participant. We conducted study 3 to further test the mechanism of satiation and address these issues.

5. Study 3: How information associated with repetition influences the effect of evaluation mode

Study 2 showed that consumers’ preference for the variety bundle in the JE mode was driven by their concern for satiation from the non-variety bundle. Study 3 seeks to further examine how the moderating effect of evaluation mode works through the mechanism of satiation, by manipulating the information associated with repetition. In particular, as repetitive consumption of the same items does not necessarily result in satiation (Fishbach et al., 2011), particularly among consumers with strong and consistent preferences, the presence of the non-variety bundle may not always activate the concern for satiation. We posit that if the association between repetitive consumption and satiation is highlighted, the non-variety bundle can easily activate consumer concern for satiation; however, if the association between repetition and consistent preferences (e.g., loyalty) is highlighted, the non-variety bundle will be less likely to activate satiation. That is, associating loyalty rather than satiation with repetition may diminish or even eliminate the effect of evaluation mode on preference for variety. In addition, while the non-variety bundle in study 1 consisted of the most popular flavor identified in a pretest, this flavor may not be the most preferred one for each individual respondent. Therefore, in study 3, we adopt another method to construct the non-variety bundle such that it comes in each participant’s personal favorite flavor. We investigate whether consumers’ desire for variety
can still override their preference under this circumstance.

5.1. Design and sample

Experimental design. The stimuli in this study were similar to those in study 1 (i.e., potato chips). However, rather than asking the participants to evaluate five given flavors of potato chips, we asked them to indicate their favorite flavor in a filler task before the main experiment. As this experiment was conducted on the computer, the participants’ favorite flavor was automatically entered into the description of the non-variety bundle in the main experiment. The only difference between the two bundles was the presence versus the absence of variety in flavor. Accordingly, this study used a 2 (information associated with repetition: satiation vs. loyalty) × 3 (evaluation mode: SE for the variety bundle vs. SE for the non-variety bundle vs. JE) between-subjects design.

Sample. Participants were recruited by an online advertisement on the bulletin board system of a large public university and were compensated for their involvement. The final sample had 206 subjects (43.2% male, mean age = 22.6 years).

5.2. Procedure and measures

The participants were randomly assigned to one of the six conditions. In each condition, they were asked to complete a series of tasks described as independent of each other. All the tasks were completed on the computer. The first task was depicted as a manufacturer’s survey aimed at understanding consumer preferences for potato chips. The participants were asked to indicate their familiarity with and favorability for potato chips as well as their favorability for each flavor listed (which included their personal favorite flavor identified in the preceding filler
task). Subsequently, the participants were exposed to the priming task of highlighting different associations with repetition, which was described as an independent “behavior analysis” task. Following the method by Fishbach, Ratner, and Zhang (2011), the material used in this task was about a college student’s repetitive consumption behaviors, such as being attired in casual sportswear on most days, purchasing the same type of ball pen, and drinking a cup of coffee almost every morning. After reading the material, the participants in the satiation-associated group were asked to rate the extent to which the student was “repetitive,” “boring,” and “dull,” which activated the satiation-based construal for repetitive consumption. However, the participants in the loyalty-associated group were asked to rate the extent to which the student was “loyal,” “strong-minded,” and “sticking to herself/himself,” which activated the preference-based construal for repetitive consumption.

These traits were embedded along other irrelevant descriptions (i.e., “optimistic” and “ambitious”) that were identical in both conditions, and were used to minimize the participants’ awareness of the nature of the priming task. Then, the participants were asked to complete the main experiment, indicating their evaluations of certain bundle(s) of potato chips. The participants in the SE conditions were asked to evaluate either the non-variety bundle that came in their most preferred flavor or the variety bundle that came in five different flavors. The participants in the JE condition were asked to simultaneously evaluate the non-variety and variety bundles. At the end, all participants were debriefed, compensated, and dismissed. The measures for consumer favorability, purchase intention, and concern for satiation for the bundles were the same as those in study 2.

5.3. Results and discussion
Manipulation check. As boringness/satiation is usually viewed negatively, the participants in the satiation-associated condition rated the student lower ($M = 4.28$) than those in the loyalty-associated condition ($M = 4.83$; $F(1, 204) = 13.00, p < .001$). This result suggests that our priming successfully influenced the information contextually associated with repetition, which subsequently biased the participants’ concern for satiation activated by the non-variety bundle. Specifically, the participants’ concern for satiation with the non-variety bundle was significantly higher in the satiation-associated condition ($M = 5.49$) than in the loyalty-associated condition ($M = 3.42$; $F(1, 178) = 73.55, p < .001$).

Results. As expected, we found that the impact of evaluation mode was greater in the satiation-associated condition than in the loyalty-associated condition (for purchase intention: $t(200) = 2.29, p < .05$), although this effect was nonsignificant for bundle favorability ($t(200) = 1.58, p > .10$). Specifically, when the association between repetition and satiation was highlighted, we found a significant moderating effect of evaluation mode. In the SE mode, the evaluation of the variety bundle was higher than that for the non-variety bundle (for favorability: $M_{\text{variety}} = 4.82$ vs. $M_{\text{non-variety}} = 4.31$, $t(67) = 1.77, p = .08$; for purchase intention: $M_{\text{variety}} = 56.53$ vs. $M_{\text{non-variety}} = 43.26$, $t(67) = 2.82, p < .01$). In the JE mode, the evaluation of the variety bundle was also significantly higher than that of the non-variety bundle (for favorability: $M_{\text{variety}} = 5.65$ vs. $M_{\text{non-variety}} = 4.16$, $t(36) = 5.50, p < .001$; for purchase intention: $M_{\text{variety}} = 74.78$ vs. $M_{\text{non-variety}} = 44.00$, $t(36) = 6.61, p < .001$). In particular, compared with the SE mode, the difference between the variety bundle and the non-variety bundle was significantly enhanced in the JE mode (for favorability: $t(103) = 2.48, p < .05$; for purchase intention: $t(103) = 2.65, p < .01$), replicating the moderating effect of evaluation mode on preference for variety. Furthermore, the evaluation of the variety bundle was significantly higher in the JE mode than in the SE mode (for
favorability: $F(1, 69) = 15.60, p < .001$; for purchase intention: $F(1, 69) = 19.09, p < .001$), while the evaluation of the non-variety bundle did not differ across the two modes (for favorability: $F(1, 70) = .25, p > .60$; for purchase intention: $F(1, 70) = .03, p > .80$), as shown in figure 3. This result suggests that the higher evaluation of the variety bundle in the JE mode drives the moderating effect.

When the association between repetition and loyalty was highlighted, the non-variety bundle in the JE mode failed to activate concern for satiation, resulting in no additional preference for the variety bundle. Specifically, the evaluation of the variety bundle was not significantly different from that of the non-variety bundle in the SE mode (for favorability: $M_{\text{variety}} = 4.88$ vs. $M_{\text{non-variety}} = 4.91, t(62) = .11, p > .90$; for purchase intention: $M_{\text{variety}} = 55.16$ vs. $M_{\text{non-variety}} = 51.63, t(62) = .85, p > .30$). There was also no significant difference between the two bundles in the JE mode (for favorability: $M_{\text{variety}} = 4.94$ vs. $M_{\text{non-variety}} = 4.86, t(35) = .32, p > .70$; for purchase intention: $M_{\text{variety}} = 60.00$ vs. $M_{\text{non-variety}} = 60.50, t(35) = -.09, p > .90$). Furthermore, the difference between the two bundles in the JE mode was not different from that in the SE mode (for favorability: $t(97) = .30, p > .70$; for purchase intention: $t(97) = -.60, p > .50$). That is, the moderating effect of the evaluation mode was eliminated when repetition was associated with loyalty rather than satiation.

Discussion. In study 3, where the items in the non-variety bundle came in the favorite flavor for each participant, the moderating effect of evaluation mode was significant only when the repetitive consumption was associated with satiation. This finding is similar to that in study 1. Thus, study 3 reveals that the concern for satiation is innately inferred from the non-variety bundle in the JE mode. However, when repetition was associated with loyalty, it suppressed the
activation of anticipated satiation from the non-variety bundle, and the moderating effect of evaluation mode disappeared. Consistent with study 2, these findings provide additional evidence for our proposition that it is the concern for satiation activated by the non-variety bundle that results in the higher evaluation of the variety bundle in the JE mode than in the SE mode. That is, the moderating effect of evaluation mode on preference for variety works through the mechanism of concern for satiation.

6. General discussion

The present research finds that consumer evaluation of the variety bundle (relative to the non-variety bundle) is significantly higher in the JE mode than in the SE mode, and the higher satiation activated by the comparison non-variety bundle leads to a higher consumer evaluation of the variety bundle in the JE mode. In essence, the moderating effect of evaluation mode on consumer preference for variety is driven by the mechanism of concern for satiation. These findings are new and contribute to the literature on both consumer variety-seeking behavior and the marketing of product bundles.

Given the prevalence of product bundles in supermarkets and other retail outlets, our findings have considerable implications for marketers. First, our research suggests that retailers will benefit by incorporating variety in the product bundles that they carry. To counteract anticipated satiation during consumption, consumers generally favor product bundles with variety. Assuming that incorporating variety in product bundles incurs little additional cost (relative to the non-variety bundle), it makes sense for retailers to incorporate different formats of variety (e.g., flavor, scent, and shape) in their bundles.

More importantly, variety has to be complemented with proper display strategies for
consumers to fully appreciate its value. We find that consumers better appreciate the value of the variety bundle when it is displayed alongside the non-variety bundle than when it is displayed by itself. This is due to the satiation activated by the non-variety bundle in the JE mode, which enhances consumer evaluation of the variety bundle. Thus, retailers seeking to drive more sales may wish to juxtapose variety bundles against non-variety bundles on store shelves. To illustrate, the value of a variety yogurt bundle would be better appreciated when it is placed next to a non-variety yogurt bundle. This effect is particularly salient if the non-variety bundle contains a large quantity of items and is from the same product category as the variety bundle.

In addition to the joint display strategy, retailers can also enhance the relative advantage of the variety bundles to the non-variety bundles by associating repetitive consumption with satiation. To illustrate, for perishable goods such as snacks, retailers can frame the expiration date to appear closer, such that consumers will prefer the variety bundle more. In addition, firms may also use advertising at the retail outlet or in-store slogans to activate consumers’ satiation-based construal of consumption (Fishbach et al., 2011) and, thus, increase their preference for the variety bundles.
References


between joint and separate evaluation of options: A review and theoretical analysis. 

*Psychological Bulletin, 125 (5), 576-590.*


FIGURE 1
THE MODERATING EFFECT OF EVALUATION MODE ON CONSUMER RESPONSES TO VARIETY (STUDY 1, N = 104)

Figure 1a. The moderating effect of evaluation mode on bundle favorability.

Figure 1b. The moderating effect of evaluation mode on purchase intention.
FIGURE 2

THE IMPACT OF THE COMPARISON BUNDLE ON EVALUATION OF THE

VARIETY BUNDLE (STUDY 2, N = 143)

Figure 2a. The impact of the comparison bundle on favorability for the variety bundle.

Figure 2b. The impact of the comparison bundle on purchase intention for the variety bundle.
FIGURE 3

THE INTERACTIVE EFFECTS OF ASSOCIATIONS WITH REPETITION AND EVALUATION MODE ON CONSUMER RESPONSES (STUDY 3, N = 206)

Satiation-based association

Loyalty-based association

Figure 3a. The interactive effect on bundle favorability

Satiation-based association

Loyalty-based association

Figure 3b. The interactive effect on purchase intention