

Romantic Crushes Promote Variety-Seeking Behavior

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Abstract

Consumers making repeat consumption choices often need to decide whether to stick to their favorite option or to select something different. Understanding the situational factors that influence their willingness to seek more or less variety in consumption is of both theoretical and practical importance. The current research proposes that a salient relationship state—romantic crush—can increase consumers' variety-seeking tendency in unrelated consumption situations. Building on the compensatory consumption literature, we suggest that the lack of reciprocal response in the romantic crush experience may lower consumers' sense of control in the romantic relationship. Therefore, they are motivated to restore their sense of control by making more varied choices in consumption domains. Five studies provide support for this hypothesis. In line with our control-restoration account, the effect disappears when consumers' sense of control is boosted via other means. Moreover, the effect is specific to the experience of a romantic crush and cannot be generalized to other types of romantic relationship (e.g., initial stage of love). (164 words)

Keywords: romantic crush, emotion, sense of control, relationship, variety seeking

Given the increasing popularity of large product assortment offerings in the marketplace, consumers today often have the chance to choose from a number of different options (e.g., activities to do on vacation; flavors of yogurt to eat over a period of several days). Variety seeking refers to the openness to exploring alternative options (Farquhar & Rao, 1976; Kahn, Kalwani, & Morrison, 1986; Pessemier, 1978). The motivational factors that influence consumers' willingness to seek variety in consumption are of both theoretical and practical importance, and therefore substantial research has been devoted to their identification. For example, variety seeking can be motivated by impression management (Ratner & Kahn, 2002), a desire to avoid boredom (Fishbach, Ratner, & Zhang, 2011), and a need for stimulation (Kahn & Isen, 1993).

Prior research examining the antecedents of variety-seeking behaviors also suggests that preference for greater variety in products is often influenced by interpersonal relationships. In line with prior literature on goal-directed behaviors, which indicates that a desire induced in one situation can carry over to another unrelated situation (e.g., Dhar, Huber, & Kahn, 2007; Huang, Dong, & Wyer, 2017; Huang, Dong, & Zhang, 2019; Xu, Schwarz, & Wyer, 2015), research in this area shows that decreased commitment to a social relationship can increase preference for variety in consumer choice. For example, people who feel that their relationships are less secure tend to prefer more variety in their choices (Ybarra, Lee, & Gonzalez, 2012). Short-term mating cues, which tend to activate a noncommittal mindset in men, can also increase variety seeking in consumption (Chen, Zheng, & Zhang, 2016). Similarly, when women are in a period of ovulation in which they are most fertile and have a greater desire for new options in men, they seek more variety in consumption (Durante & Arsena, 2015). In these cases, variety seeking in product choices is driven by the generalized need for new options in interpersonal relationships.

Our research, however, suggests that beyond the increased desire for variety in mate options, the lowered sense of control induced by the lack of reciprocity in the romantic crush situation can also lead to greater variety-seeking behavior in product choice. Having a crush is a common experience—it happens when one is romantically attracted to someone but has not yet revealed these feelings for the crush target. Romantic crush is also a popular theme in TV programs, songs, and fiction. Although extant research has begun to examine the effects of a consumer's romantic relationship with his or her partner on consumption preferences and choices (e.g., Cavanaugh, 2014; Etkin, 2016; Griskevicius et al., 2007; Huang et al., 2017; Wang & Griskevicius, 2014; for a review, see Cavanaugh, 2016), the psychological consequences of romantic crush are seldom investigated (see Huang et al., 2019, for an exception). To fill this gap, in this research we examine whether, how, and why romantic crush can affect consumer behavior—in particular, one's variety-seeking tendency in consumption.

In the remainder of this article, we develop our conceptualization of why romantic crush may enhance variety-seeking tendency in product choice, drawing on the compensatory consumption literature. We report five studies that test our predictions.

Theoretical Background

Characteristics of Romantic Crush

According to the *Merriam-Webster Dictionary*, romantic crush refers to the romantic feeling for someone that is not revealed. Crush is considered to be a preliminary stage of a romantic relationship, and therefore whether the relationship will turn out to be rewarding is not guaranteed. It is a nearly universal experience—according to a survey of 544 young adolescents, 56% of them admitted that they currently have a crush on someone (Bowker, Spencer, Thomas, & Gyoerkoe, 2012). A romantic crush has little overlap with mutual

romantic relationship (boyfriend/girlfriend), sex partner, or close friends. There are at least two defining features of romantic crush that are central to our conceptual development.

First, the desired target of a crush is rather exclusive. Exclusivity is one of the key distinctions between romantic love and sexual desire, as sexual desire can be potentially fulfilled by any appropriate partner (Eastwick, 2009; Ma & Gal, 2016). Indeed, when a sexual desire is salient, if a preferred partner is not available, people can accept another individual as an alternative to satisfy this desire (Aral, 2006; Johnson, Wadsworth, Wellings, & Field, 1994). However, for a potential partner in a committed romantic relationship, if the preferred partner is not available, it is much more difficult to replace this desired person by another. Although romantic crush is a preliminary stage of a committed romantic love relationship, the exclusive nature of the partner is still applied.

Second, by definition, people in a crush have not yet communicated their feelings to the desired target, though they hold expectations for starting a romantic relationship with this person to whom they are attracted (Oettingen & Mayer, 2002). Thus, in contrast to romantic love and other positive feelings with family members or close friends, romantic crush is certainly not a mutual relationship, and the strong romance sentiment held by the person experiencing romantic crush is unilateral (Huang et al., 2019). Due to the unreciprocated nature, the romantic crush experience is likely to be mixed, bearing both a positive thought of the possibility of starting a romance relationship with the desired target, and a painful and uncomfortable experience due to the lack of reciprocal response. To this extent, whether the crush feelings have been shared or not, per se, should not be the key factor. This is consistent with the findings of a recent research on romantic crushes (Huang et al., 2019), which showed that even when people with a salient romantic crush have revealed their feelings to a third party (e.g., a friend), they remain aware that their feelings toward the desired target are not reciprocated.

Thus, the experience of romantic crush is likely to lower people's sense of control in the romantic relationship for the reason that the experience, as an unreciprocated relationship, is not wholly positive. Because people experiencing romantic crush are not able to receive a reciprocal response from the desired target, whether a romantic relationship will begin is highly uncertain. It is known that uncertainty regarding events and outcomes of an experience can lead to a feeling of lack of control. Specifically, when people do not have the knowledge of the outcome, they feel lack of control (Berger & Bradac, 1982). Similarly, economic uncertainty could lead people with poorer compared to wealthier childhoods to perceive a lower sense of personal control over their lives (Mittal & Griskevicius, 2014). Applying similar logic in the romantic domain, if people experiencing a crush do not know the prospect of the relationship with the desired target and they sense that their intense feelings toward the desired target are non-reciprocal, they will feel a lack of control over this relationship. In sum, while most mutual romantic relationships are positive in nature, the experience of romantic crush can oftentimes be uncertain and may even be torturous, which is likely to induce a lower sense of control in this situation.

To reiterate, the exclusive nature of romantic crush imposes very strict limitations on the choice of potential romantic partners, and the lack of reciprocal response further strengthens the sense of low control in the romantic relationship. In other words, a romantic crush can seriously threaten one's sense of control in the relationship domain. Previous research shows that when people perceive a lack of resources, they are motivated to engage in compensatory consumption (e.g., Cutright, 2011; Huang et al., 2017; Rucker & Galinsky, 2008). For example, when consumers realize that their relationship partner has paid attention to another person and thus feel jealous about it, they will purchase more attention-grabbing products to regain attention (Huang et al., 2017). We next explain why variety seeking may be used as a way to restore the lowered sense of control in romantic relationship.

Variety Seeking as a Control-Restoring Behavior

It is commonly believed and observed that personal control is a basic human need (Kelly, 1955; Lefcourt, 1973). Perceived lack of control is an undesirable state, and thus when people feel low in control in their personal lives, they will be motivated to reinstate their sense of control. Such motivation has been shown to affect people's subsequent product choices (Chen, Lee, & Yap, 2017; Cutright, 2011). For instance, when consumers perceive a loss of control over their environment and personal lives, they will prefer to acquire utilitarian products in order to restore their sense of control (Chen et al., 2017). Similarly, when consumers have no control over the outcome of their lives, they seek greater structure in consumption (e.g., purchasing paintings with frames; Cutright, 2011).

In the shopping context, variety seeking can be considered as another symbolic means to reassert one's sense of control. This is mainly because choice can be viewed as a form of mastery over one's environment (Snibbe & Markus, 2005; Stephens, Markus, & Townsend, 2007) and serves as a source of personal control (Langer, 1975; Taylor, 1989). Having choices can boost one's autonomy and personal agency (Ryan & Deci, 2000), and thus choice is considered a form of exerting control over and mastering one's environment (Stephens et al., 2007). Variety seeking is therefore recognized as a way to express independence and individuality (Kim & Drolet, 2003). Indeed, consumers seek high variety when they are motivated to restore the sense of control (Inesi et al., 2011; Yoon & Kim, 2018). Specifically, it is found that when deprived of a source of control, consumers tend to choose a large assortment over a smaller one (Inesi et al., 2011). Moreover, poor consumers who perceive low economic mobility and thus low sense of control will seek more variety in consumption (Yoon & Kim, 2018).

We predict that a similar effect can arise in individuals experiencing romantic crush, with a sense of low control in the romantic domain (i.e., they are not sure about whether they

can start a romantic relationship with the desired target) activated by the psychological state of romantic crush due to its exclusive and non-reciprocal nature. As a result of this feeling, they may be more likely to choose greater variety in subsequent consumption domains. More formally, we hypothesize that:

H1: Romantic crush can increase consumers' subsequent variety-seeking tendency in unrelated consumption situations in which the crush target is not involved.

H2: The effect of romantic crush on variety seeking is mediated by the lowered sense of control in one's relationship with the desired target.

Overview of Studies

Five studies provide consistent support for our hypotheses. Studies 1–3 examine the basic effect and show that when the experience of a romantic crush is salient, participants express a greater variety-seeking tendency in unrelated consumption situations. The effect was demonstrated with both measured (i.e., actual crush status, study 1) and manipulated (studies 2 and 3) romantic crush experience, and with both hypothetical (studies 1 and 3) and real choice measures (study 2). Study 4 replicated the effect and provided direct evidence that the effect of romantic crush on consumers' subsequent variety-seeking tendency is driven by the perceived lack of control in one's romantic relationship. Finally, study 5 provides further evidence for the underlying mechanism by demonstrating that the effect is weakened when people are provided with another opportunity to boost their feelings of control—thereby compensating for the lack of control activated in the romantic relationship domain.

As a set, the five studies present convergent evidence showing that a salient romantic crush experience can heighten one's subsequent variety-seeking tendency. Moreover, we compare the salience of romantic crush experiences with (a) typical daily experiences (study 2) and (b) a positive romantic relationship experience (i.e., initial stage of love; studies 3–5) in order to show that the proposed effect is specific to romantic crushes. Across the studies,

we ruled out psychological confinement, mood, arousal, or involvement as alternative explanations.

Study 1

The goal of study 1 was to test our basic hypothesis—that is, whether romantic crushes can increase consumers' subsequent variety-seeking tendency, as compared to the control condition. Specifically, we examined whether consumers' actual romantic crush state may affect the extent to which they would seek greater variety in consumption. We compared participants' variety-seeking tendency between those who reported having romantic crushes and those who did not.

Method

Participants and Design. One hundred and forty-three undergraduate students (72 males; $M_{\text{age}} = 21.33$ years, $SD = 2.01$, one missing data for age recorded) from a large Asian university were recruited in this study for payment.

Procedure. Participants were instructed that the researchers were interested in understanding university students' consumption preferences. Specifically, they were asked to imagine that they were planning to buy some yogurt, and that they came across a bundle of five yogurt servings at a local supermarket. Each serving is about 5 oz. In the *variety-bundle* condition, participants were told that the bundle included five different flavors (Raspberry, Peach, Blueberry, Strawberry, and Black Cherry). In the *single-flavor-bundle* condition, participants were told that the yogurt servings in the bundle are all the same flavor (i.e., one of the five flavors available in the variety-bundle condition was randomly presented). In both conditions, participants were presented with a picture of the yogurt bundle (see the methodological details appendix [MDA] for the stimuli). Then, participants were asked to indicate their attitude toward the yogurt bundle from 1 (negative/unfavorable/dislike it very much/very unlikely to buy) to 7 (positive/favorable/like it very much/very likely to buy).

Participants' responses to the four items were highly correlated ($\alpha = .94$) and were therefore averaged to create an attitude index.

Lastly, we measured participants' current crush status ("Do you have a crush on somebody right now?" 1 = yes, 2 = no). We presented this item as one of several demographic measures to reduce attention to this measure and the possibility of demand effect. A total of 66 participants reported currently having a romantic crush, and 77 participants reported not having a romantic crush at this time. In the end, participants indicated their mood during the study (1 = sad to 9 = happy) and arousal level (Fedorikhin & Patrick, 2010; 1 = relaxed/sluggish/depressed/drowsy, 9 = stimulated/frenzied/upbeat/energetic; averaged to create an index of arousal, $\alpha = .82$).

Results and Discussion

Gender, Age, and Relationship-Status Effects. In all five studies, we measured participants' gender, age, and marital status (1 = married, 2 = single, 3 = in a relationship). Across all studies, gender, age, and marital status showed no influence on our predicted effects. However, it is worth noting that we found a significant main effect of marital status in study 1 as well as a significant main effect of age in studies 4 and 5. We report the details of these results in the MDA.

Variety-Seeking Tendency. A 2 (bundle) \times 2 (crush) ANOVA on participants' yogurt-preference index revealed an expected bundle \times crush interaction effect ($F(1, 139) = 5.18, p = .024, \eta^2 = .036$; see Table 1 for the means and SDs). Consistent with our prediction, the participants who reported currently having a romantic crush expressed a more positive attitude toward the variety bundle ($M = 5.39, SD = 1.02$) than the single-flavor bundle ($M = 4.49, SD = 1.62; F(1, 139) = 7.35, p = .008; Cohen's d = 0.66$). However, among the participants who reported not having a romantic crush, their attitude toward the two types of yogurt bundle was indifferent ($M_{\text{variety-bundle}} = 4.69, SD = 1.38; M_{\text{single-flavor-bundle}} = 4.82, SD =$

1.33; $F < 1$). Put differently, participants who reported currently having a romantic crush expressed a more positive attitude toward the variety bundle, compared to those who reported not having a romantic crush (5.39 vs. 4.69; $F(1, 139) = 4.90, p = .029$; Cohen's $d = 0.58$). However, participants' evaluation of the single-flavor bundle did not differ based on their romantic crush status (4.49 vs. 4.82; $F(1, 139) = 1.02, p = .313$). Notably, participants' evaluation of the yogurt is the lowest in the crush/single-flavor condition.

See table 1

Mood and Arousal. No significant differences were observed in participants' mood ($ps > .09$) or arousal ($ps > .22$) across the four conditions (see Table 1). A regression predicting participants' variety-seeking tendency from the romantic crush status (1 = romantic crush, -1 = no current crush), bundle (1 = variety bundle, -1 = single-flavor bundle), mean-centered mood, and their interactions revealed a significant main effect of mood ($b = .24, SE = .07, t(135) = 3.42, p = .001$) and, more importantly, the expected significant interaction of romantic crush \times bundle condition ($b = .27, SE = .11, t(135) = 2.40, p = .018$). Similarly, a regression predicting participants' variety-seeking tendency from romantic crush status (1 = romantic crush, -1 = no current crush), bundle (1 = variety bundle, -1 = single-flavor bundle), mean-centered arousal, and their interactions revealed a significant main effect of arousal ($b = .16, SE = .05, t(193) = 2.89, p = .004$), a significant arousal \times bundle interaction effect ($b = .19, SE = .09, t(193) = 2.19, p = .030$), and the expected significant romantic crush \times bundle interaction effect ($b = .19, SE = .09, t(193) = 2.19, p = .030$). Thus, neither mood nor arousal could account for the effect of romantic crush on participants' subsequent heightened variety-seeking tendency.

Discussion. Study 1 provides support for our proposed hypothesis by showing that participants who had romantic crushes expressed greater variety-seeking tendency, as shown

in their preferences for the variety (vs. the single-flavor) bundle, compared to those who did not.

Study 2

In study 2, we intended to test the causal relationship between romantic crush and variety-seeking tendency by manipulating the salience of a romantic crush relationship (vs. a neutral event). In addition, we investigated the external validity of the finding observed in study 1 by measuring consumers' real variety-seeking behavior.

Method

Participants and Design. One hundred and thirty-one undergraduate students (53 males; $M_{\text{age}} = 21.49$ years, $SD = 1.97$) from a large Asian university took part in the study for payment. Participants were randomly assigned to one of two between-subjects conditions (romantic crush vs. control).

Procedure. In the first task, participants were told that the researchers were currently collaborating with a writers' workshop to evaluate a concept for a new magazine story. The magazine featured articles on various issues related to people's daily lives. However, unlike other magazines, it took a more personal approach, as the authors could be anyone wanting to share his or her own experiences with others. This manipulation was adopted from Huang et al. (2019). Given this background, the participants in the *romantic crush* condition (vs. the *control* condition) were asked to write a story entitled "I Am Having a Crush on Somebody" (vs. "My Typical Day"). They were asked to write in a personalized and vivid manner, such that when others read the story, they would feel what the writer was experiencing. In the *romantic crush* condition, participants were asked to imagine and describe the romantic feelings they were having toward somebody whom they found very attractive and extremely special, but to whom they had not yet revealed their feelings. In the *control* condition, participants were asked to write about their typical daily experience. To facilitate their story

writing, we provided a few opening sentences to help the participants in each condition to get started (Huang et al., 2019; see the MDA for more details).

After writing their stories, participants indicated their mood during the study (1 = sad to 9 = happy) as well as their level of involvement in the writing task (“How involved/engaged/interested were you in the writing task in the beginning of the study?” 1 = not at all, 9 = very involved/engaged/interested; $\alpha = .90$, averaged to create an index of level of involvement). They also reported their demographic details (age, gender, and marital status).

Lastly, participants were told that as a token of appreciation for their participation in the study, they could select four pieces of chewy candies from five available flavors including Grape, Strawberry, Apple, Orange, and Mango. They were further instructed to select as many or as few flavors as they preferred for their choices of the four candies. At the end of the study, participants picked up their chosen candies from the experimenter. The number of different flavors that participants chose served as the dependent variable in this study.

Results and Discussion

Variety-Seeking Tendency. As expected, the participants who wrote a story about a romantic crush selected more flavors ($M = 3.51$, $SD = .77$) than did the participants who wrote about their typical-day experiences ($M = 3.17$, $SD = 1.03$; $F(1, 129) = 4.57$, $p = .034$, $\eta^2 = .034$).

Mood and Involvement. No significant differences were found in terms of participants’ mood ($M_{\text{crush}} = 5.94$, $SD = 1.87$; $M_{\text{control}} = 6.23$, $SD = 1.57$; $F < 1$). In addition, a regression predicting participants’ variety-seeking tendency from the romantic crush condition (1 = romantic crush, -1 = control), mean-centered mood, and their interaction revealed only a significant main effect of romantic crush ($b = .17$, $SE = .08$, $t(127) = 2.08$, p

= .039). No other effects were found to be significant ($ps > .34$). Therefore the effect of romantic crush on variety-seeking tendency could not be explained by mood.

Although participants in the control condition reported a higher level of involvement in the writing task than did those in the romantic crush condition ($M_{\text{crush}} = 5.34$, $SD = 2.03$; $M_{\text{control}} = 6.31$, $SD = 1.50$; $F(1, 129) = 9.82$, $p = .002$, $\eta^2 = .071$), a regression predicting participants' variety-seeking tendency from the romantic crush condition (1 = romantic crush, -1 = control), mean-centered involvement, and their interaction revealed only a significant main effect of romantic crush ($b = .17$, $SE = .08$, $t(127) = 2.02$, $p = .046$). No other effects were significant ($ps > .56$). Moreover, the effect of recall condition on variety-seeking tendency remained significant after controlling for level of involvement ($F(1, 128) = 3.95$, $p = .049$, $\eta^2 = .030$).

Discussion. The results of this study provided further support for our hypothesis that the salience of a romantic crush can increase consumers' subsequent variety-seeking tendency. Moreover, the effect was demonstrated with a real behavioral choice.

Study 3

In study 2, we demonstrated the proposed effect by comparing the experience of romantic crush with that of neutral events. However, one might wonder whether the effect of romantic crush on variety-seeking tendency observed in study 2 can be driven by differences in consumers' feeling of psychological confinement in choosing the romantic partner, or their concern about appearing interesting in front of the romantic partner, or desire for sensory stimulation from the romantic partner, given that psychological confinement, concerns about appearing interesting, and desire for sensory stimulation have all been shown to enhance one's variety-seeking tendency (Inman, 2001; Levav & Zhu, 2009).

To evaluate these various alternative explanations, in study 3, we compared the experience of romantic crush with another romantic experience, namely, the initial stage of

love (a type of mutual romantic relationship). We selected initial stage of love as the control condition through a pretest in which we examined the similarities and differences between romantic crush and two other interpersonal relationship experiences, including initial stage of love and stable relationship (see details in the following section). The pretest verified our assumptions regarding the unique characteristics of romantic crush experience by demonstrating that although romantic crushes and stable relationship are different in terms of several dimensions (e.g., perceived sense of control, concern about appearing interesting, psychological constraint in one's choice of relationship partner, and desire for sensory stimulation), romantic crush and initial stage of love are very similar along these dimensions, with the only difference being the level of perceived personal control in the relationship.

Pretest: Method

One hundred and fifty-one participants (78 males; $M_{\text{age}} = 37.40$ years, $SD = 13.38$) were recruited from Amazon's Mechanical Turk, the same subject pool used in the main study. The participants were randomly assigned to one of three conditions (romantic crush vs. initial stage of love vs. stable relationship). Following a procedure similar to study 2, the participants first completed a survey entitled "Writing Workshop." The participants in the *romantic crush* condition were asked to write a story on "I Am Having a Crush on Somebody." The participants in the *initial stage of love* condition wrote a story on "I Just Fell in Love with Somebody." The participants in the *stable relationship* condition wrote a story on "I Am in a Stable Relationship with Somebody." As in study 2, to facilitate the story writing, we provided the participants in each condition with several sentences to begin with (see the MDA for details).

After writing their stories, all participants answered a set of questions regarding the relationship partner they wrote about. These questions related to (a) personal control in the relationship (2-item; averaged to create an index of personal control, $r = .91$, $p < .001$; see

Table 2 for a summary of the detailed measures), (b) psychological restraint in choice of relationship partner (3-item; averaged to form an index of psychological restraint, $\alpha = .94$), (c) concern about appearing interesting in front of the relationship partner (2-item; averaged to create an index of concern about appearing interesting, $r = .63, p < .001$), (d) desire for sensory stimulation (8-item; averaged to form an index of desire for sensory stimulation, $\alpha = .90$; adopted from Huang et al., 2019), (e) mood (1 = sad, 9 = happy), (f) arousal (1 = relaxed/sluggish/depressed/drowsy, 9 = stimulated/frenzied/upbeat/energetic; averaged to create an index of arousal, $\alpha = .73$), (g) the extent to which concentrating one's focus on the relationship partner might be depleting (1-item), and (h) involvement in the writing task (3-item; averaged to form an index of involvement, $\alpha = .90$). Lastly, participants indicated their demographic details.

See Table 2

Pretest: Results and Discussion

Perceived Personal Control in the Relationship. As expected, participants in the crush relationship felt a lower level of control in the relationship than did those in the other two conditions ($F(2, 148) = 9.04, p < .001, \eta^2 = .11$; romantic crush vs. initial stage of love: 4.56 vs. 5.91, $F(1, 148) = 8.94, p < .001$; romantic crush vs. stable relationship: 4.56 vs. 6.41, $F(1, 148) = 16.62, p < .001$; see Table 3).

Psychological Constraint in Choice of the Relationship Partner. Participants in both the romantic crush condition and the initial stage of love condition reported feeling more constrained in their choice of relationship partner, compared to those in the stable relationship condition ($F(2, 148) = 4.22, p = .017, \eta^2 = .054$).

Concern about Appearing Interesting. In addition, participants in both the romantic crush condition and the initial stage of love condition expressed a greater concern about

appearing interesting in front of their romantic relationship partner, compared to those in the stable relationship condition ($F(2, 148) = 2.99, p = .053, \eta^2 = .039$).

Desired Sensory Stimulation. As expected, participants in all three conditions had a desire to achieve more sensations from the target, indicating a similar strength of motivation across all three conditions ($F(2, 148) = 2.11, p = .125, \eta^2 = .028$), although participants in both the romantic crush condition ($F(1, 148) = 3.27, p = .073$) and the initial stage of love condition ($F(1, 148) = 3.14, p = .079$) expressed a marginally higher desire for sensory stimulation than did those in the stable relationship condition.

Mood, Arousal, Depletion, and Involvement. Participants in all three conditions did not differ in terms of mood, arousal, depletion, or involvement in the writing task ($ps > .17$).

See Table 3

In summary, the results from this pretest provided support for our conceptualization of the romantic crush. Thus, we selected initial stage of love as the comparison condition in our next three studies, since the two are similar in all the dimensions we measured except personal control. If we observe the proposed effect in the romantic crush condition, but not the initial stage of love condition, it can help rule out a series of alternative explanations including psychological constraint, concern about appearing interesting, desired sensory stimulation, mood, arousal, depletion, and involvement.

Main Study: Method

Participants and Design. One hundred and ninety participants (90 males; $M_{\text{age}} = 39.92$ years, $SD = 12.61$) recruited from Amazon's Mechanical Turk platform participated in this study for payment. They were randomly assigned to one of two between-subjects conditions (romantic crush vs. initial stage of love).

Procedure. Following a procedure similar to the first two studies, the participants first completed a survey entitled "Writing Workshop." The participants in the *romantic crush*

condition were asked to write a story on “I Am Having a Crush on Somebody.” The participants in the *initial stage of love* condition wrote a story on “I Just Fell in Love with Somebody.” As in study 2, to facilitate the story writing, we provided participants in each condition with several sentences to begin with (see the MDA for details).

After completing the writing task, participants proceeded to an ostensibly unrelated second task, in which they carried out a snack-choice task (Fishbach et al., 2011; Simonson, 1990). They were asked to imagine that they would be served one snack each week for the following five weeks and to decide which snack out of six options (including peanuts, tortilla chips, crackers and cheese, Snickers bar, milk chocolate with almonds, and Oreo cookies) they would like to have for each week. The total number of different snacks that participants chose to have over the five weeks (up to five) was coded as participants’ tendency to seek variety.

Lastly, participants reported their demographic details. To more fully test the role of emotions in the effect of romantic crush on consumers’ variety-seeking tendency, participants completed the PANAS scale (Watson, Clark, & Tellegen, 1988), capturing both their positive (10 items; averaged to create an index of positive affect, $\alpha = .94$) and negative affect (10 items; averaged to create an index of negative affect, $\alpha = .94$) during the study. They also indicated how involved, interested, and engaged they were in the writing task in the beginning of the study ($\alpha = .92$, averaged to create an index of level of involvement).

Results and Discussion

Variety-Seeking Tendency. In support of our hypothesis, participants who wrote about a crush experience expressed a greater variety-seeking tendency ($M = 3.61$, $SD = 1.22$) than their counterparts who wrote about their initial stage of love ($M = 3.18$, $SD = 1.28$; $F(1, 188) = 5.52$, $p = .020$, $\eta^2 = .029$).

Affect and Involvement. Participants in the romantic crush condition ($M = 5.25$, $SD = 2.04$) felt less positive affect than those in the initial stage of love condition ($M = 6.08$, $SD = 2.03$; $F(1, 188) = 7.86$, $p = .006$, $\eta^2 = .040$). Similarly, those in the romantic crush condition ($M = 2.08$, $SD = 1.48$) experienced marginally more negative affect than those in the initial stage of love condition ($M = 1.70$, $SD = 1.26$; $F(1, 188) = 3.71$, $p = .056$, $\eta^2 = .019$). Neither participants' positive affect nor negative affect experienced during the study could predict their subsequent variety-seeking tendency ($ps \geq .07$). The main effect of condition on variety-seeking tendency remains significant even after including positive and negative affect as covariates ($F(1, 186) = 5.92$, $p = .016$, $\eta^2 = .031$).

A regression predicting participants' variety-seeking tendency from the romantic crush condition (1 = romantic crush, -1 = initial stage of love), mean-centered positive affect, mean-centered negative-affect, and their interactions with the romantic crush condition revealed the expected significant main effect of romantic crush condition ($b = .23$, $SE = .09$, $t(184) = 2.55$, $p = .011$). Moreover, we observed a significant romantic crush \times negative affect interaction effect ($b = .17$, $SE = .07$, $t(184) = 2.50$, $p = .013$). Spotlight analysis (Aiken & West, 1991) showed that the effect was stronger among participants who experienced greater negative affect (+1SD; $M_{\text{crush}} = 3.90$, $M_{\text{initial-stage-of-love}} = 3.04$, $b = .43$, $SE = .13$, $t(186) = 3.31$, $p = .001$) compared to those who experienced a lower level of negative affect (-1SD; $M_{\text{crush}} = 3.24$, $M_{\text{initial-stage-of-love}} = 3.30$, $p > .83$).

No significant differences were observed in terms of participants' level of engagement in the writing task across the two conditions ($M_{\text{crush}} = 7.23$, $SD = 1.82$; $M_{\text{initial-stage-of-love}} = 7.39$, $SD = 1.96$; $F < 1$). A regression predicting participants' variety-seeking tendency from the romantic crush condition (1 = romantic crush, -1 = initial stage of love), mean-centered involvement, and their interaction only revealed the expected significant main effect of romantic crush condition ($b = .22$, $SE = .09$, $t(186) = 2.38$, $p = .018$).

Discussion. These results provide further evidence that the experience of romantic crush increases participants' variety seeking, as shown in their choices of snacks to be consumed across five consecutive weeks. In this study, we used initial stage of love as the comparison group. As the initial stage of love shares many similar characteristics with romantic crush, the results also ruled out various alternative explanations, including psychological constraint in one's choice of relationship partners, concern about appearing interesting, desire for more sensory stimulation, mood, arousal, depletion, and involvement.

Furthermore, we found in this study that the interaction effect is evident for negative emotions. It is possible that some negative emotions (e.g., nervous) may have a particularly high negative correlation with perceived sense of control, thus heightening one's desire for control as well as variety-seeking tendency. We return to this point in the General Discussion section to discuss the role of emotions in this effect.

Study 4

In study 4, we intended to provide direct evidence for the mechanism underlying the effect we observed in the first three studies. Specifically, we directly measured consumers' perceived control in their relationship and tested its potential mediating effect on the relationship between actual romantic crush and variety-seeking tendency. We also tested the role of psychological constraint as a rival explanation for the proposed effect.

Method

Participants and Design. Two hundred and three participants (103 males; $M_{\text{age}} = 36.84$ years, $SD = 11.79$, one missing data for age recorded) recruited from Amazon's Mechanical Turk platform participated in this study for payment. They were randomly assigned to one of two between-subjects conditions (romantic crush vs. initial stage of love).

Procedure. Following a procedure similar to studies 2 and 3, the participants first completed a survey entitled "Writing Workshop." The participants in the *romantic crush*

condition were asked to write a story on “I Am Having a Crush on Somebody.” The participants in the *initial stage of love* condition wrote a story on “I Just Fell in Love with Somebody.” As in studies 2 and 3, to facilitate the story writing, we provided participants in each condition with several sentences to begin with (see the MDA for details).

After completing the writing task, participants proceeded to an ostensibly unrelated second task, in which they were informed that the researchers were interested in understanding people’s consumption preferences. Specifically, they were asked to rate their interest in staying in the same hotel or different hotels in the same city when traveling abroad, along a scale from 1 (definitely prefer staying in the same hotel) to 7 (definitely prefer staying in different hotels), adapted from Fishbach et al. (2011). Participants’ responses to this item served as the dependent measure (variety seeking).

Afterwards, as potential mediating measures, participants were asked to indicate how much control they felt they had over the relationship with the person they described in the writing task, from 1 = not at all/little to 9 = a great deal/a lot (the same 2-item scale as in the pretest for study 3). We averaged participants’ responses to form an index of perceived control in the relationship ($r = .94, p < .001$).

In addition, we measured participants’ psychological constraint in choice of relationship partners, with participants completing the same 3-item scale as in the pretest for study 3: (a) “To what extent do you feel restrained in looking for romantic relationship partners?” 1 = not at all, 9 = very much so; (b) “To what extent do you feel your choice of romantic relationship partner is restrained?” 1 = not at all, 9 = very much so; and (c) “I feel my freedom of romantic partner choice is restricted,” 1 = strongly disagree, 9 = strongly agree. We averaged participants’ responses to form an index of psychological restraint in choice of relationship partner ($\alpha = .63$).

Lastly, participants reported their demographic details.

Results and Discussion

Variety-Seeking Tendency. As predicted, participants who wrote about a crush experience expressed a greater variety-seeking tendency ($M = 4.25$, $SD = 2.01$) than their counterparts who wrote about their initial stage of love ($M = 3.56$, $SD = 2.10$; $F(1, 201) = 5.63$, $p = .019$, $\eta^2 = .027$).

Perceived Control in Relationship. Participants who were in the romantic crush condition expressed lower perceived control in their relationship ($M = 4.83$, $SD = 2.58$) than those in the initial stage of love condition ($M = 5.67$, $SD = 2.36$; $F(1, 201) = 5.86$, $p = .016$, $\eta^2 = .028$).

Mediation Analysis. Regression analyses revealed that romantic crush (coded as “1” and “0” otherwise) was negatively associated with perceived control in the relationship ($b = -.84$, $SE = .35$, $t(201) = -2.42$, $p = .016$) and positively associated with a preference for greater variety in consumption ($b = .69$, $SE = .29$, $t(201) = 2.37$, $p = .019$). Moreover, the perceived control in relationship was negatively associated with a preference for greater variety ($b = -.19$, $SE = .06$, $t(201) = -3.30$, $p = .001$). When both the romantic crush and perceived control were used to predict variety-seeking tendency, the significance of the effect of the romantic crush decreased ($b = .54$, $SE = .29$, $t(200) = 1.89$, $p = .061$), but that of the effect of perceived control did not ($b = -.17$, $SE = .06$, $t(200) = -2.96$, $p = .003$; see Figure 1). The indirect effect of the romantic crush condition was further supported by the bootstrapping method (Hayes 2013) based on 5,000 samples. The 95% confidence interval ranged between .0141 and .3477, excluding 0.

See Figure 1

Psychological Constraint in Choice of Relationship Partners. Replicating the findings in the pretest for study 3, participants in the romantic crush condition ($M = 5.12$, SD

= 2.18) and those in the initial stage of love condition ($M = 5.21$, $SD = 2.00$, $F < 1$) expressed similar psychological constraint in their choice of relationship partner. In addition, a multiple-mediation model where both perceived control and psychological constraint were entered as potential mediators supported only the mediating role of perceived control (95% CI = [.0125, .3466], excluding 0), and not that of psychological constraint (95% CI = [-.0728, .0475], including 0).

Discussion. These results provide further evidence that the experience of romantic crush increases participants' variety seeking, as shown in their preferences for staying in the same hotel versus different hotels. The effect is driven by the perceived lack of control in the romantic relationship. In addition, the observed effect of romantic crush on variety seeking is not based on the psychological confinement of romantic crush per se, since participants in the romantic crush condition and the initial stage of love condition reported feeling equally confined in the relationship.

Study 5

The purpose of study 5 is to provide further evidence for the proposed mechanism by the logic of moderation-of-process (Spencer, Zanna, and Fong 2005). If our proposed mechanism based on control restoration is accurate, then when people are offered an alternative means to restore their sense of control, they may be less likely to feel the lack of control and therefore less likely to seek variety in order to boost their control.

Method

Participants and Design. Two hundred and one participants (96 males; $M_{\text{age}} = 36.84$ years, $SD = 12.59$) recruited from Amazon's Mechanical Turk online platform took part in the study for payment. They were randomly assigned to conditions of a 2 (romantic crush vs. initial stage of love) \times 2 (sense-of-control boost vs. no control boost) between-subjects design.

Procedure. Participants were informed that the study consisted of several unrelated tasks conducted by different researchers. To manipulate the salience of romantic crush experiences, in the first task, similar as in studies 2-4, participants in the *romantic crush* condition were asked to write a story about having a crush on someone and to describe in a personalized and vivid manner what they would do and how they would feel. The participants in the *initial stage of love* condition were asked to write about their initial stage of love experience (see the MDA for details).

After that, all participants were asked to complete an ostensibly unrelated, second task entitled “Daily Experience Study,” in which they were told that the researchers were interested in collecting information about people’s daily life experience. Given this cover story, in the *sense-of-control boost* condition, participants were asked to recall and describe a time when they felt they were in complete control of a situation. This approach has been demonstrated in previous research to be effective in boosting one’s sense of control (Yoon & Kim, 2018). In the *no control boost* condition, participants were asked to recall and describe an ordinary activity.

After writing about the activities, in the third task, participants proceeded to a purportedly unrelated survey entitled “Product Preference Survey,” where they were asked to choose five servings of yogurt from five flavors (Boston Cream Pie, Apricot Mango, Red Velvet Cake, Vanilla, and Lemon) for a hypothetical special offer: “Choose any combination of five yogurt servings for \$5.” This task was adopted from Yoon and Kim (2018). The number of different yogurt flavors that participants chose served as the variety-seeking tendency index.

Lastly, participants reported their mood (1 = sad, 9 = happy), level of arousal (Fedorikhin & Patrick, 2010; 1 = relaxed/sluggish/depressed/drowsy, 9 = stimulated/frenzied/upbeat/energetic; averaged to create an index of arousal, $\alpha = .75$), as well as their level of involvement in the study (“How involved/engaged/interested were you in the

study?” 1 = not at all, 9 = very involved/engaged/interested; $\alpha = .91$, averaged to create an index of level of involvement). They then reported their demographic details.

Results and Discussion

Variety-Seeking Tendency. As expected, we found a significant romantic crush \times control boost interaction effect ($F(1, 197) = 4.25, p = .041, \eta^2 = .021$). Specifically, replicating the findings of our prior studies, among participants in the *no control boost* conditions, participants who wrote about a romantic crush experience expressed a greater variety-seeking tendency ($M = 3.13, SD = 1.21$) compared to those who wrote about an initial stage of love experience ($M = 2.62, SD = 1.15; F(1, 197) = 4.45, p = .036; \text{Cohen's } d = 0.43$). However, this effect disappears among participants in the *control boost* conditions ($M_{\text{crush}} = 2.92, SD = 1.29; M_{\text{initial-stage-of-love}} = 3.13, SD = 1.26; F < 1; \text{Cohen's } d = 0.16$).

Mood, Arousal, and Involvement. No significant differences were observed in participants' mood ($ps > .49$), arousal ($ps > .61$), or involvement ($ps > .13$) across the four conditions (see Table 4 for the means and SDs). A regression predicting participants' variety-seeking tendency from romantic crush condition (1 = romantic crush, -1 = initial stage of love), control (1 = control boost, -1 = no control boost), mean-centered mood, and their interactions revealed only the expected significant interaction of romantic crush \times control condition ($b = .18, SE = .09, t(193) = 2.06, p = .041$). Similarly, in a regression predicting participants' variety-seeking tendency from romantic crush condition (1 = romantic crush, -1 = initial stage of love), control (1 = control boost, -1 = no control boost), mean-centered arousal, and their interactions we found a significant main effect of arousal ($b = .16, SE = .05, t(193) = 2.89, p = .004$) and the expected significant romantic crush \times control condition interaction ($b = .19, SE = .09, t(193) = 2.19, p = .030$). Lastly, a regression predicting participants' variety-seeking tendency from romantic crush condition (1 = romantic crush, -1 = initial stage of love), control (1 = control boost, -1 = no control boost), mean-centered

involvement, and their interactions revealed only the expected significant interaction of romantic crush \times control condition ($b = .19$, $SE = .09$, $t(193) = 2.15$, $p = .032$). Thus, none of these factors could account for the effect of romantic crush on participants' subsequent heightened variety-seeking tendency.

See Table 4

Discussion. The results of this study provided further evidence for our hypothesis that the salience of a romantic crush experience can increase consumers' subsequent variety-seeking tendency. Moreover, we showed that the effect disappeared when participants were given an opportunity to restore their sense of control, thus further supporting our proposed control-restoration mechanism driving the effect. Notably, we would like to acknowledge that within the crush conditions, the difference between the control-boost and no-control-boost conditions is only directional (3.13 vs. 2.91, $F < 1$). We suspect a possible reason for such an insignificant result is that we adopted a general control-boost task, and such a task might not be able to sufficiently boost people's sense of control in the romantic relationship domain (for the discussion on the differences between *within*-domain and *cross*-domain compensation strategies, please see Lisjak, Bonezzi, Kim, & Rucker, 2015). This reasoning is also consistent with the goal system theory (Kruglanski et al., 2002), which suggests that only when more direct means are deemed to be less probable can motivation have a strong influence on indirect strategies. Future research might employ a control-boost task that can directly boost people's sense of control in the romantic relationship domain. In addition, although we did not have a priori prediction regarding the contrast within the initial-stage-of-love conditions, we observed a significant difference (2.62 vs. 3.13, $F(1, 197) = 4.44$, $p = .036$).

General Discussion

The results of five studies offer converging evidence that romantic crush experiences increase consumers' subsequent variety-seeking tendency in consumption. The effect is specific to romantic crush and does not generalize to other positive romantic relationship experiences such as initial stage of love (studies 3–5). Notably, the effect of romantic crush on consumers' variety-seeking tendency is contingent on the extent to which they experience a sense of lack of control in the romantic relationship domain as a result of the salient romantic crush (study 4). When participants were provided with an opportunity to restore their sense of control, the positive effect of romantic crush on variety seeking in consumption disappeared (study 5). The effect is demonstrated with both Asian and North American participants using both hypothetical and real choice measures.

Alternative interpretations of our findings were called into question. For example, perceived psychological constraint in choosing relationship partner, desire for sensory contact with the relationship partner, and one's concern about appearing interesting in front of the relationship partner could not explain our findings (cf. the pretest of study 3). If that were the case, then participants who were thinking about their initial stage of love experience should also have been more inclined to choose more variety, which did not happen (studies 3–5). Moreover, positive or negative affect, involvement, and mood or arousal could not explain the pattern of results we observed.

Theoretical Contributions and Implications

Our conceptualization of these effects intersects with theory and research in two different areas, involving (a) the psychological consequences of romantic crush and (b) the psychological functions of variety seeking in consumption, thereby contributing to each of these two research areas.

First, this research extends current literature on the psychological consequences of romantic crush (e.g., Adams-Price & Greene, 1990; Furman & Collins, 2009; Huang et al.,

2019; Hurlock & Klein, 1934; Oettingen & Mayer, 2002) by investigating the impact of this experience on consumer decision making—in particular, variety-seeking tendency.

According to the results of our studies, a romantic crush is a common yet unique experience; once salient, it can have a predictable influence on consumers' preferences for diversification in their consumption choices.

Second, previous research examined a series of different antecedents of consumers' variety-seeking behavior, including mood (Kahn & Isen, 1993), need for stimulation (Menon & Kahn, 1995), characteristics of a product category (van Trijp, Hoyer, & Inman, 1996), preference uncertainty (Simonson, 1990; Simonson & Winer, 1992), contextual factors such as the time of day at which purchases occur (Roehm & Roehm, 2004), physical constraint (Levav & Zhu, 2009), and consumers' death anxiety (Huang & Wyer, 2015). Our work extends this line of research by investigating a novel situational factor—that is, the experience of romantic crush—that can shape consumers' preference for variety.

To this extent, our research also contributes to the burgeoning literature showing that consumers' romantic relationships can impact their variety-seeking behavior (e.g., Chen et al., 2016; Durante & Arsena, 2015; Ybarra et al., 2012). Most of the prior findings are built on the goal generalization theory (Kruglanski et al., 2002). For instance, it has been shown that women during the ovulatory phase of the cycle are known to prefer more variety in consumer choice. This effect occurs because fertility enhances women's desire for new options in men, which in turn activates a more general variety-seeking mindset (Durante & Arsena, 2015). Similarly, it has been shown that male consumers express a greater variety-seeking tendency in the presence of short-term but not long-term mating cues because the short-term mating cues activate a noncommittal mindset in the relationship domain, which spills over to relationship-unrelated consumption domains, while female consumers express a lower variety-seeking tendency in the presence of long-term but not short-term mating cues,

as those long-term cues can activate a commitment mindset in the relationship domain for women that generalizes to relationship-unrelated domains (Chen et al., 2016). Our research demonstrates an effect that is not driven by goal generalization; rather, we show that the salience of romantic crush experiences can evoke a sense of lack of control in the romantic relationship domain, which systematically shapes (increases) consumers' subsequent variety-seeking behavior.

Third, our research contributes to the perceived-control literature by identifying romantic crush as a novel factor that could influence one's sense of control. Personal control is a basic human need (Kelly, 1955; Lefcourt, 1973). A large body of research in marketing demonstrates that lower perceived sense of control has a broad impact on various domains of consumer behavior. For example, a plethora of previous research suggests that once people perceive threats to their sense of control, they are motivated to reinstate a level of control through consumption behaviors such as acquiring utilitarian products (Chen et al., 2017), seeking greater structure in products (Cutright, 2011), and seeking high variety (Inesi et al., 2011; Yoon & Kim, 2018). Our research thus contributes to the control-restoration literature by showing that the romantic experience can also be a trigger for a lower sense of control and thereby impact consumer decision making.

Furthermore, this research sheds light on the possible antecedents of the lowered sense of control when experiencing a romantic crush. Using a text analysis application called Linguistic Inquiry and Word Count developed by Pennebaker and colleagues (Pennebaker, Boyd, Jordan, & Blackburn, 2015), we analyzed the text data (i.e., the stories participants wrote) collected in studies 2–5. Since romantic crush is an emotional experience (Huang et al., 2019), we examined the relevant affect-related dimensions using the LIWC application, including positive emotions, negative emotions, anxiety, anger, and sadness. In addition, we analyzed the extent to which the text revealed uncertainty feelings due to the nature of

romantic crush as an unexpressed and unreciprocated romantic relationship experience. By combining all participants in studies 2–5 (total $N = 725$), the results (see Table 5) revealed that, compared to the control groups, participants in the romantic crush groups (a) expressed more negative emotions in general ($M_{\text{crush}} = 1.39$, $SD = 2.21$, $M_{\text{control/initial-stage-of-love}} = .69$, $SD = 1.54$; $F(1, 723) = 24.54$, $p < .001$), (b) expressed more anxiety ($M_{\text{crush}} = .54$, $SD = 1.38$, $M_{\text{control/initial-stage-of-love}} = .22$, $SD = .69$; $F(1, 723) = 15.71$, $p < .001$) and sadness feelings ($M_{\text{crush}} = .43$, $SD = 1.05$, $M_{\text{control/initial-stage-of-love}} = .15$, $SD = .59$; $F(1, 723) = 18.85$, $p < .001$), and (c) used fewer certainty-related words ($M_{\text{crush}} = 1.99$, $SD = 2.93$, $M_{\text{control/initial-stage-of-love}} = 2.36$, $SD = 2.79$; $F(1, 723) = 3.15$, $p = .076$) to describe their experience. Since anxiety (Chorpita & Barlow, 1998; Griffin et al., 2003) and uncertainty (Edwards & Weary, 1998; Weary & Edwards, 1994) can both lead to lower sense of control, we believe that such emotional reactions accompanying the romantic crush experience could be the key factors explaining why romantic crush, as an intense emotional experience, could induce feelings of lack of control. We hope future research can extend our work by systematically examining how discrete emotions might affect consumers' romantic crush experiences and their subsequent consumption behaviors.

See Table 5

This research also has important managerial implications. Having a crush on someone nowadays can be reflected in social media, songs, movies, and ads. Fanta, a beverage brand, launched a viral ad called “Fanta tastes like seeing your first crush” that describes the fantasy of a young man thinking about his crush target. Moreover, many contemporary consumers choose to disclose their relationship status through social media. It would be worthwhile for marketers to customize the content of their direct marketing messages to match the promoted products with the consumers' romantic states. For marketers, it is feasible to track a

consumer's relationship status, and to target those who are currently having a crush on someone with promotional campaigns involving a high variety of options. In addition, as romantic crush is a popular theme portrayed in television shows and movies, it may be wise for marketers to consider placing advertising in shows that feature romantic crush themes when promoting products with a variety of choice alternatives (e.g., tablecloths in different patterns, gourmet coffee capsules with different flavors). Lastly, celebrity crush offers another possibility to apply our findings. One recent report showed that one fifth of college students admitted to having a crush on a celebrity (Olson, 2015). When consumers have salient crushes toward celebrities, they might also have an enhanced preference for products and services of greater variety. Given the prevalence of celebrity crushes, marketers may want to promote products with a variety of choice options to fan clubs where membership involves a strong crush on a celebrity.

Opportunities for Future Research

Across five studies, we provided consistent evidence that romantic crush can increase consumers' subsequent variety-seeking tendency, driven by the perceived lower sense of control in their romantic relationship. This finding suggests that different romantic states (e.g., crush, initial stage of love) can exert different impacts on consumers' consumption preferences. Future research could fruitfully examine the potential influence of other romantic relationship states on consumption preferences. For example, it is known that happiness in a relationship often declines around year seven of a marriage, known as the "seven-year itch" phenomenon (Tsapelas, Aron, & Orbuch, 2009). We predict that such a state of marriage might also increase consumers' variety-seeking tendency, albeit due to a different reason (i.e., the greater desire to seek sensation from consuming variety).

Another interesting consideration is that we focused on examining variety seeking as one consequence of the feeling of lack of control. Future research could investigate other

downstream consequences that result from the lowered sense of control. Greater preference for utilitarian (vs. hedonic) products is one of the outcomes. Previous research has shown that when people are experiencing lower sense of control, they express greater preference for more functional, utilitarian products (Chen et al., 2017). It is possible that consumers experiencing romantic crushes may also prefer options that are more utilitarian because these products are associated with problem-solving, which can promote the sense of control. These interesting possibilities await future investigation.

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Table 1. Summary of Results – Study 1

	Romantic Crush		No Romantic Crush	
	Variety Bundle (N = 36)	Single-Flavor Bundle (N = 30)	Variety Bundle (N = 35)	Single-Flavor Bundle (N = 42)
Variety-Seeking	5.39(1.02) ^a	4.49(1.62) ^b	4.69(1.38) ^b	4.82(1.33) ^{a,b}
Mood	6.17(1.60) ^a	5.87(1.89) ^a	6.54(1.34) ^a	6.14(1.60) ^a
Arousal	5.12(1.56) ^a	5.08(1.66) ^a	5.43(1.46) ^a	5.01(1.29) ^a

Note: Cells with different superscripts in each row differ at $p < .05$.

Table 2. Summary of Measures – Pretest for Study 3

<i>Dimension</i>	<i>Items</i>
Personal control in relationship	“How much control do you feel you have over the relationship with this person?” 1 = not at all/little, 9 = a great deal/a lot
Psychological constraint	(1) “To what extent do you feel restrained in looking for romantic relationship partners?” 1 = not at all, 9 = very much so (2) “To what extent do you feel your choice of romantic relationship partner is restrained?” 1 = not at all, 9 = very much so (3) “I feel my freedom of romantic partner choice is restricted,” 1 = strongly disagree, 9 = strongly agree
Concern about appearing interesting in front of the relationship partner	(1) “To what extent you want to appear interesting in front of this person?” 1 = not at all, 9 = very much (2) “To what extent you want this person view you as a humorous person?” 1 = not at all, 9 = very much
Desire for sensory stimulation	(1) “Are you satisfied with your current level of physical closeness with the person you described in the writing task?” 1 = “I am unsatisfied and would desire more intimacy with this person” to 9 = “I am satisfied with the current intimacy with this person” (reversed coded) (2) “To what extent would you want to be touched more by this person?” 1 = not at all to 9 = very much (3) “To what extent would you love to touch this person more?” 1 = not at all to 9 = very much (4) “To what extent would you love to hear this person’s voice more?” 1 = not at all to 9 = very much (5) “To what extent would you love to experience the smell of this person more often?” 1 = not at all to 9 = very much (6) “To what extent would you like to see this person more?” 1 = not at all to 9 = very much (7) “To what extent would you like to kiss this person more?” 1 = not at all to 9 = very much (8) “In general, to what extent would you desire greater intimacy with this person?” 1 = not at all to 9 = very much
Depletion	“How tired did you feel after finishing the writing task?” 1 = not at all, 9 = very tired

Table 3. Summary of Results for the Pretest of Study 3

	Romantic Crush	Initial Stage of Love	Stable Relationship	<i>F</i> -statistics and <i>p</i> - value
(1) Personal Control in the Relationship	4.56(2.60) ^a	5.91(2.30) ^b	6.41(1.81) ^b	$F(2, 148) = 9.04,$ $p < .001$
(2) Psychological Constraint in Choice of Relationship Partners	5.40(2.44) ^a	4.87(2.61) ^{a,b}	3.95(2.56) ^b	$F(2, 148) = 4.22,$ $p = .017$
(3) Concern about Appearing Interesting	7.35(1.70) ^a	7.46(1.54) ^a	6.72(1.59) ^b	$F(2, 148) = 2.99,$ $p = .053$
(4) Desire for More Sensory Stimulation	6.84(1.81) ^a	6.84(1.20) ^a	6.27(1.71) ^a	$F(2, 148) = 2.11,$ $p = .125$
(5) Mood	6.22(2.51) ^a	6.73(1.99) ^a	6.60(2.00) ^a	$F(2, 148) = .768,$ $p = .466$
(6) Arousal	5.89(1.39) ^a	6.24(1.54) ^a	5.84(1.44) ^a	$F(2, 148) = 1.08,$ $p = .342$
(7) Depletion in the Writing Task	3.44(2.48) ^a	3.39(2.56) ^a	3.10(2.46) ^a	$F(2, 148) = .26,$ $p = .769$
(8) Involvement in the Writing Task	7.69(1.27) ^a	7.27(1.53) ^a	7.15(1.75) ^a	$F(2, 148) = 1.78,$ $p = .172$

Note: Cells with different superscripts in each row differ at $p < .05$. For desire for more sensory stimulation, both romantic crush ($F(1, 148) = 3.27, p = .073$) and initial stage of love ($F(1, 148) = 3.14, p = .079$) are marginally higher than the stable-relationship condition.

Table 4. Summary of Results – Study 5

	No Control Boost		Sense-of-Control Boost	
	Romantic Crush (N = 48)	Initial Stage of Love (N = 58)	Romantic Crush (N = 48)	Initial Stage of Love (N = 47)
Variety-Seeking	3.13(1.21) ^a	2.62(1.15) ^b	2.92(1.29) ^{a,b}	3.13(1.26) ^a
Mood	6.83(2.16) ^a	6.84(2.08) ^a	7.02(1.72) ^a	6.74(1.80) ^a
Arousal	5.95(1.70) ^a	5.91(1.71) ^a	5.86(1.43) ^a	5.78(1.55) ^a
Involvement	7.36(1.81) ^a	7.39(1.75) ^a	7.22(1.72) ^a	6.85(1.91) ^a

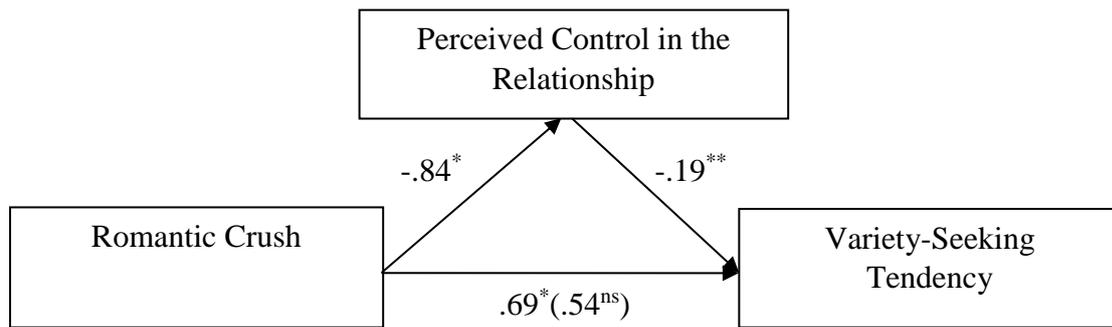
Note: Cells with different superscripts differ at $p < .05$.

Table 5. Results of the LIWC Analysis Using Data from Studies 2–5

	Positive Emotions	Negative Emotions	Anxiety	Anger	Sadness	Certainty
Romantic	5.62 ^a	1.39 ^a	.54 ^a	.13 ^a	.43 ^a	1.99 ^a
Crushes	(10.47)	(2.21)	(1.38)	(.59)	(1.05)	(2.93)
Control/Initial	6.24 ^a	.69 ^b	.22 ^b	.09 ^a	.15 ^b	2.36 ^b
Stage of Love	(9.13)	(1.54)	(.69)	(.47)	(.59)	(2.79)

Notes. (1) Among the four studies (studies 2–5) included in this analysis, study 2 employed a baseline control (i.e., typical day experience) condition, whereas studies 3–5 employed initial stage of love as the control condition. (2) Cells of each column with unlike superscripts differ at the $p < .001$ level except for certainty ($p = .076$).

Figure 1. Mediation Analysis (Study 4)



Note: ** significant at the .01 level; * significant at the .05 level.