Effects of Mating Mindsets on Variety Seeking

by

Yu-Wei Hu

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Abstract

This research shows that mating mindsets, which consumers commonly experience, can have a crucial impact on consumers' variety seeking tendencies. In two studies, we find that male consumers in a long-term mating mindset (versus a non-mating mindset) exhibit more (versus less) variety seeking behavior. For male consumers, the effects of mating mindsets on variety seeking are driven by sensitivity to errors of omission. However, for female consumers, variety seeking behavior and sensitivity to errors of omission were not significantly different across mating and non-mating conditions. In closing, the author discusses theoretical and managerial implications.

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Chapter 1

Introduction

Researchers in marketing and psychology have identified a number of factors that influence variety seeking behavior, including simultaneous and sequential choices (Simonson 1990), mood and emotions (Kahn and Isen 1993), misprediction of future preferences (Kahneman and Snell 1990; Read and Loewenstein 1995), choice in group settings (Ariely and Levav 2000), and public and private consumption (Ratner and Kahn 2002). We add to this body of work by investigating the effects of a new antecedent variable, mating mindsets, on variety seeking. Previous research shows that mating mindsets are triggered by the presence of real or imagined desirable people of the opposite sex (Griskevicius, Cialdini, and Kenrick 2006). For instance, dating or even browsing a dating website can activate thoughts about mating (Monga and Gürhan-Canli 2012). Similarly, mating mindsets can be stimulated by sexy or romantic advertisements, movies, or TV shows (Griskevicius and Kenrick 2013). A prior study also reveals that men and women think about mating many times a day (Jones and Barlow 1990). Therefore, given that mating mindsets are

experienced so commonly, it becomes imperative that marketing researchers investigate their impacts on consumer behavior. However, all prior studies on variety seeking have ignored the influence of mating mindsets. To fill this gap, the current research is the first to introduce mating mindsets and an evolutionary perspective into the variety seeking literature. The evolutionary perspective offers novel insights and may stimulate new directions for studies of variety seeking.

Mating is an enduring and important concern for all humans. Because men and women have historically confronted different adaptive problems about mating, both sexes profoundly differ in their evolved psychologies of mate choices (Buss and Schmit 1993). In this research, we argue that these psychological sex differences in mate choices would significantly influence men and women's variety seeking behavior in product choice. Across two studies, we identify factors, such as romantic relationship types, that moderate the influence of mating mindsets and demonstrate the underlying mechanism. Our findings show that male consumers in a long-term mating mindset (versus a non-mating mindset) exhibit more (versus less) variety seeking behavior. However, female consumers did not exhibit significantly different variety seeking behaviors across mating and non-mating conditions. Our findings contribute to a better understanding of variety seeking behavior by showing that mating mindsets play an important role in determining male consumers' sensitivity to errors of omission. This research also contributes to an emerging

stream of research that calls for a better understanding of how evolutionary psychology can impart insights into consumer behavior (Dahl, Sengupta, and Vohs 2009; Griskevicius et al. 2009; Monga and Gürhan-Canli 2012). The rest of the paper is organized as follows. We begin with a literature review and develop our theoretical framework and hypotheses. We then test the hypotheses in studies 1 and 2, and conclude the paper with a discussion of the theoretical and practical implications of the studies.

Chapter 2

Theoretical Background

2.1 Mating Mindsets

Mating is an enduring and important concern for all humans (Monga and Gürhan-Canli 2012). Previous research shows that men and women often experience mating mindsets in their daily lives (Jones and Barlow 1990). Some researchers suggest that mating-related thoughts can be triggered by many objects in the external situations, such as attractive opposite-sex people being present in person, online, or on TV. Being in a romantic relationship or going on a date can also encourage people to think about mating (Buss and Barnes 1986; Monga and Gürhan-Canli 2012). Recent research in psychology shows that mating mindsets can significantly influence aggression (Griskevicius et al. 2009), compliance (Griskevicius et al. 2006), and willingness to buy conspicuous and benevolent products (Griskevicius et al. 2007; Iredale, Van Vugt, and Dunbar 2008). In addition, Griskevicius, Cialdini, and Kenrick (2006) find that both men and women in a mating mindset show boosts in creativity. They suggest that

when mating mindsets are induced, people are attuned to information about the desirability of others as romantic partners and their own desirability. From an evolutionary perspective, creativity is a signal of good genes to a potential mate. Therefore, both men and women value creativity in a mate and tend to express creativity to attract a potential mate when they are in a mating mindset (Griskevicius et al. 2006; Haselton and Miller 2006; Kanazawa 2000; Li et al. 2002; Møller and Petrie 2002; Zahavi and Zahavi 1997).

However, given the fact that people are involved in not only long-term mating relationships (e.g., marriage) but also short-term ones (e.g., a one-night stand), Griskevicius et al. (2006) further suggest that the expression of creativity is moderated by the type of mating mindsets. Drawing on parental investment theory, they propose and show that in long-term mating mindsets, both men and women engage in creative displays. This is because both sexes in a long-term mating relationship are expected to invest significantly if a child is conceived (i.e., parental costs). As a result, both men and women have to be selective in their long-term mate choice (Kenrick et al. 1990) and must impress a potential mate through creative displays (Griskevicius et al. 2006). However, the difference between men and women in the expression of creativity appears when they are in a short-term mating mindset (e.g., a one-night stand). They find that in short-term mating mindsets, only men engage in creative displays; whereas women do not. This is because women in short-term relationships would be expected to invest significantly if a child is conceived; whereas men

would not. As a result, women tend to be careful and selective in their short-term mate choice (Kenrick et al. 1990), and it is the man who engages in creative displays to impress a potential short-term mate. In summary, as shown by prior research, men's and women's expressions of creativity are significantly influenced by long-term and short-term mating mindsets (Griskevicius et al. 2006).

2.2 Mating Mindsets and Variety Seeking

Prior research suggests that the central feature of creativity is a thinking process that produces multiple unusual and novel solutions to a single problem (Guilford, 1967, 1968). When such a thinking process is in operation, people strive to break away from their existing mental frameworks. Previous research shows that people with a creative mindset are more open to change, more willing to try and error, look for more diversity, and avoid missing out on different possibilities than those with a less creative mindset (Burroughs and Mick 2004; Burroughs et al. 2008; Smith and Yang 2004). Building on the findings, this research proposes that, when creative people face a choice involving the simultaneous selection of multiple items, they are more sensitive to errors of omission and, thus, more likely to seek variety than those with a less creative mindset. This is because variety offers a way of capturing additional opportunities of diversity. Failure to do so would be an error of omission. In contrast, people with a less creative mindset are less sensitive to errors of omission. Variety could be a potential mistake for them. As a result,

the safer option would be to consistently choose the most preferred alternative. Therefore, when less creative people face a choice involving the simultaneous selection of multiple items, they tend not to seek variety.

In the context of this research, we predict that mating mindsets will influence consumers' variety seeking tendencies. It is because, as mentioned previously, men in both a long-term and a short-term mating mindset show boosts in creativity; whereas women show a creative increase only when they are primed with thoughts of a long-term mate. Hence, we expect that male consumers in both a short-term and a long-term mating mindset become more sensitive to errors of omission and, consequently, exhibit more variety seeking behavior than male consumers in a non-mating mindset. We also anticipate that female consumers in a long-term mating mindset become more sensitive to errors of omission and, thus, exhibit more variety seeking behavior than female consumers in both a short-term mating and a non-mating mindset. We hypothesize the following:

H1: Male consumers in both a short-term and a long-term mating mindset will exhibit more variety seeking behavior compared with male consumers in a non-mating mindset.

H2: Female consumers in a long-term mating mindset will exhibit more variety seeking behavior compared with female consumers in a short-term mating or a non-mating mindset.

Chapter 3

Study 1

3.1 Methods for Study 1

3.1.1 Design and Participants

Hypotheses 1 and 2 were tested using a 2 (gender: male versus female) × 3 (mindset: non-mating versus short-term mating versus long-term mating) between-subjects design. A total of 145 participants (48.30% males and 51.70 % females; age range from 19 to 70 years) were recruited through Amazon Mechanical Turk. Each male or female participant was randomly assigned to one of the three mating mindset conditions.

3.1.2 Mating Primes

The participants in the mating mindset conditions read one of two scenarios of similar length about a long-term or a short-term romantic

relationship in which the participants were asked to imagine themselves as the protagonist of the scenario. We adapted this manipulation method from Griskevicius et al. (2006). In the long-term mating condition, a male participant was asked to imagine meeting a highly attractive woman on the university campus, and they spend a romantic evening together, including a candlelit dinner and a sweet kiss goodnight. The long-term story emphasizes that this highly attractive woman is likely to be a good committed relationship partner. In the short-term mating condition, a male participant was asked to imagine that he spends a romantic afternoon with a highly attractive woman during the last day of vacation on an exotic island; the story ends as the man and the woman are passionately kissing on a moonlit beach. Throughout the short-term story, it is emphasized that the man and the woman would likely never see each other again. The two priming stories for the female participants are similar to those for males with the exception that the protagonist is a woman. Participants in the non-mating mindset condition were asked to imagine getting ready to go to a music concert with a friend of the same sex. During the night of the show, the protagonist of the scenario could not find the concert tickets. However, the scenario has a happy ending as the same-sex friend shows up with the tickets, and they go to this much-anticipated concert in a great mood.

After reading one of the three scenarios, participants indicated to what extent they were experiencing sexual arousal, romantic arousal, positive mood, and negative mood on nine-point scales with the endpoints at 1 (not at all) and

9 (very much). In addition, participants in the mating conditions indicated the quality of various characteristics regarding the person whom they imagined desiring in the scenario. Specifically, participants were asked four questions that were generally phrased in the following way: "To what extent is this person _____." and participants provided their responses on a scale of 1 (not at all) to 9 (very much). The questions asked about the imagined mate's perceived trustworthiness, level of commitment, level of faithfulness, and desirability as a long-term partner. Next, participants were administered the main dependent variables.

3.1.3 Dependent Measures

Creativity was measured by two questions on nine-point scales with the endpoints at 1 (not at all) and 9 (very much): "How much do you care about being a creative person?" and "How important is it that others consider you a creative person?" The two questions were combined into a creativity index ($r = 0.78$; Cronbach's alpha = 0.88). Participants were then asked to imagine that they would be served one ice cream each week in the following five weeks, and they decided which flavor out of the nine options (i.e., chocolate, strawberry, dulce de leche, coffee, vanilla, rum and raisin, mango sorbet, raspberry sorbet, and green tea,) they would like to have for each week. Participants were told that they could choose different flavors every week, the same flavor every week, or anywhere in between. We measured variety seeking by counting the number

of flavors that each participant chose at least once. Next, participant's sensitivity to errors of omission was measured by asking participants to indicate to what extent they tended to be open-minded for the sake of embracing unfamiliar flavors they might like. Sensitivity to errors of commission was measured by asking participants to indicate to what extent they tended to be conservative for the sake of avoiding unfamiliar flavors they might not like. Finally, participants responded to questions asking about their background (e.g., age, relationship status, number of children they have, etc.). Upon completion of the questionnaires, they were debriefed and thanked.

3.2 Results for Study 1

3.2.1 Manipulation Check

Romantic and Sexual Arousal

The results of the ANOVA indicated that the mating mindset manipulations were successful. We found that compared with participants in the non-mating condition, those who read the mating scenarios reported significantly more romantic arousal (M_{mating} = 7.61, $M_{control}$ = 1.26; $F(1,143) = 1025.58$, $p < .001$). There were no significant differences in romantic arousal across the two mating scenarios for male or female participants (*M*s between 7.22 and 7.72; all *p*s

> .1). The results also showed that both male and female participants in the mating conditions were experiencing significantly more sexual arousal than those in the non-mating condition (M_{mating} = 6.31, $M_{control}$ = 1.18; $F(1,143)$ = 255.5, $p < .001$). However, male participants in the long-term mating condition reported significantly less sexual arousal than those in the short-term mating condition ($M_{long\text{-}term}$ = 6.28, $M_{short\text{-}term}$ = 7.53; $p < .05$).

Mate Quality

As expected, the results of the ANOVA showed that participants perceived different levels of faithfulness, commitment, trustworthiness, and long-term mate value across the short-term and the long-term mating condition. Specifically, for male participants, the imagined mate in the long-term (versus short-term) scenario was perceived as significantly more faithful ($M_{long\text{-}term}$ = 7.00, $M_{short\text{-}term}$ = 4.67; $F(1,38)$ = 19.53, $p < .001$), more trustworthy ($M_{long\text{-}term}$ = 7.32, $M_{short\text{-}term}$ = 4.87; $F(1,38)$ = 20.01, $p < .001$), more committed ($M_{long\text{-}term}$ = 7.00, $M_{short\text{-}term}$ = 4.80; $F(1,38)$ = 16.21, $p < .001$), and of higher long-term mate quality ($M_{long\text{-}term}$ = 7.76, $M_{short\text{-}term}$ = 6.00; $F(1,38)$ = 10.55, $p < .01$). For female participants, we found the similar patterns of the results. The imagined mate in the long-term (versus short-term) scenario was perceived as significantly more faithful ($M_{long\text{-}term}$ = 7.09, $M_{short\text{-}term}$ = 4.83; $F(1,53)$ = 23.38, $p < .001$), more trustworthy ($M_{long\text{-}term}$ = 7.25, $M_{short\text{-}term}$ = 4.78; $F(1,53)$ = 36.01, $p < .001$), more committed ($M_{long\text{-}term}$ = 7.13, $M_{short\text{-}term}$ = 4.70; $F(1,53)$ = 26.43, $p < .001$), and of

higher long-term mate quality ($M_{long\text{-}term}$ = 7.71, $M_{short\text{-}term}$ = 5.57; $F(1,53) = 25.28$, $p < .001$).

Mood

The results of the ANOVA showed that participants were experiencing highly positive mood across the three conditions (*M*s between 7.39 and 8.34), and none of the conditions produced much negative mood for participants (*M*s between 1.50 and 2.78). For male participants, there were no significant differences across the three conditions (all *p*s > .1); whereas for female participants, the long-term mating prime produced a significantly higher level of positive mood ($M_{long\text{-}term}$ = 8.34, $M_{short\text{-}term}$ = 7.39; $p < .05$) and a significantly lower level of negative mood ($M_{long\text{-}term}$ = 1.50, $M_{short\text{-}term}$ = 2.78; $p < .001$) than did the short-term prime.

3.2.2 Creativity and Variety Seeking

Creativity

The results of the ANOVA showed that male participants in the short-term mating condition scored higher on creativity than those in the non-mating condition; whereas male participants in both the long-term mating and the non-mating condition reported the same levels of creativity. The differences were

not significant across the three conditions ($M_{short\text{-}term}$ = 6.53, $M_{long\text{-}term}$ = 6.30, $M_{control}$ = 6.30; all *ps* > .1; Figure 3-1). Female participants in the long-term mating condition reported a higher level of creativity than those in the short-term mating or the non-mating condition. However, there were no significant differences across the three conditions ($M_{long\text{-}term}$ = 6.42, $M_{short\text{-}term}$ = 5.59, $M_{control}$ = 5.51; all *ps* > .1; Figure 3-1).

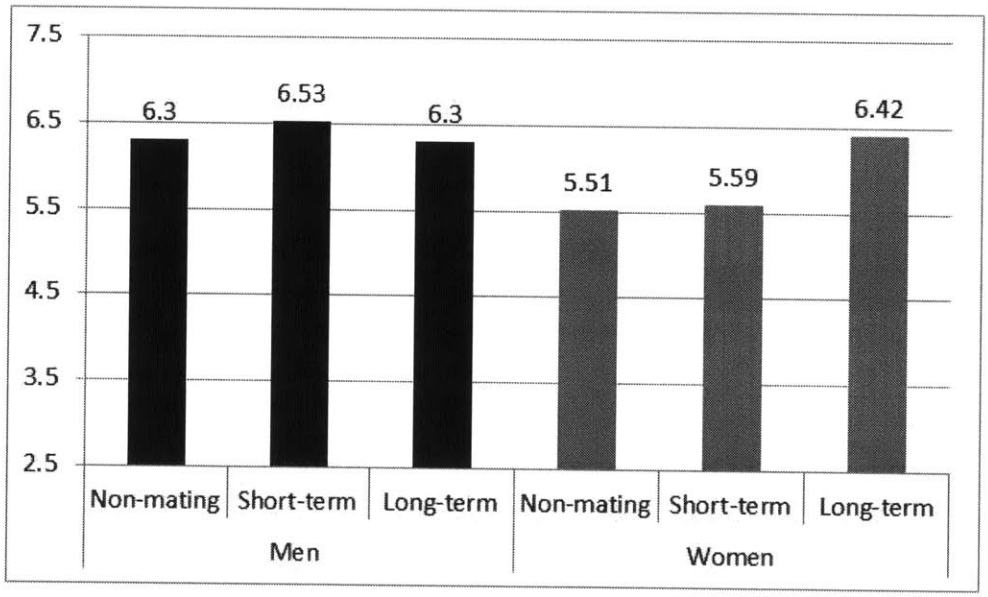

Figure 3-1: Men's and women's creativity depending on type of prime

Sensitivity to Errors of Commission and Omission

As shown in Figure 3-2 and Figure 3-3, the results of the ANOVA indicated that male participants in both the short-term and the long-term mating condition scored higher on sensitivity to errors of omission than those in the

non-mating condition. However, only the difference between the short-term mating and the non-mating condition was significant ($M_{\text{short-term}} = 6.07$, $M_{\text{control}} = 3.83$; $p < .05$; $M_{\text{long-term}} = 4.28$, $M_{\text{control}} = 3.83$; $p > .1$). In addition, male participants in both the short-term and the long-term mating condition scored lower on sensitivity to errors of commission than those in the non-mating condition, but only the difference between the short-term and the control condition was significant ($M_{\text{short-term}} = 3.80$, $M_{\text{control}} = 6.03$; $p < .05$; $M_{\text{long-term}} = 5.68$, $M_{\text{control}} = 6.03$; $p > .1$). On the other hand, female participants in the long-term mating conditions scored higher on sensitivity to errors of omission than those in the non-mating condition. But, female participants in the short-term mating conditions scored higher on sensitivity to errors of omission than those in the long-term mating condition. The differences were not significant across the three conditions ($M_{\text{short-term}} = 4.74$, $M_{\text{long-term}} = 4.22$, $M_{\text{control}} = 3.1$; all ps $> .1$). In addition, female participants in the long-term mating conditions scored higher on sensitivity to errors of commission than those in the non-mating or the short-term mating condition. The differences were not significant across the three conditions ($M_{\text{long-term}} = 5.97$, $M_{\text{short-term}} = 4.64$, $M_{\text{control}} = 5.7$; all ps $> .1$).

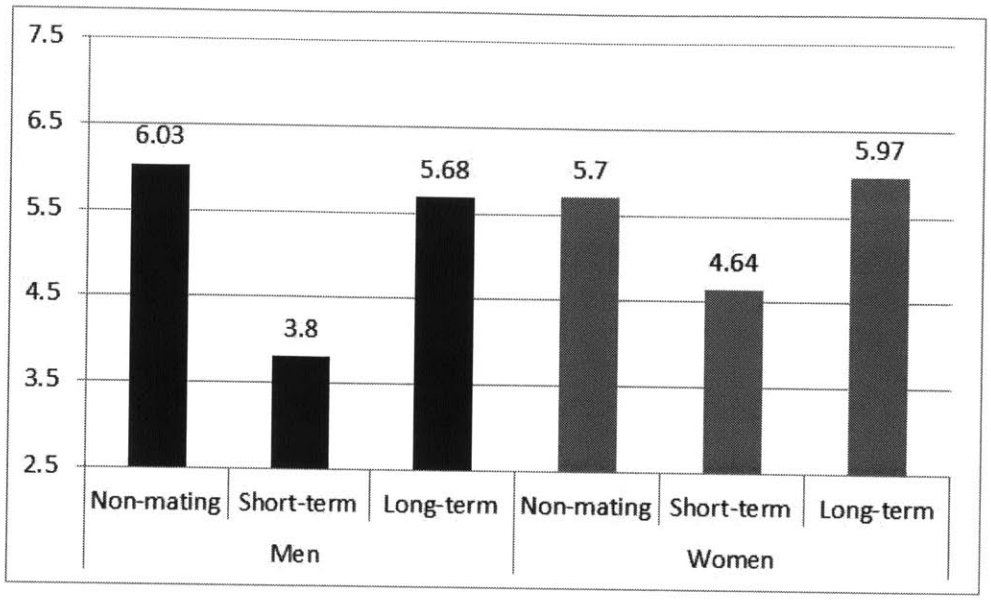

Figure 3-2: Men's and women's sensitivity to errors of commission depending on type of prime

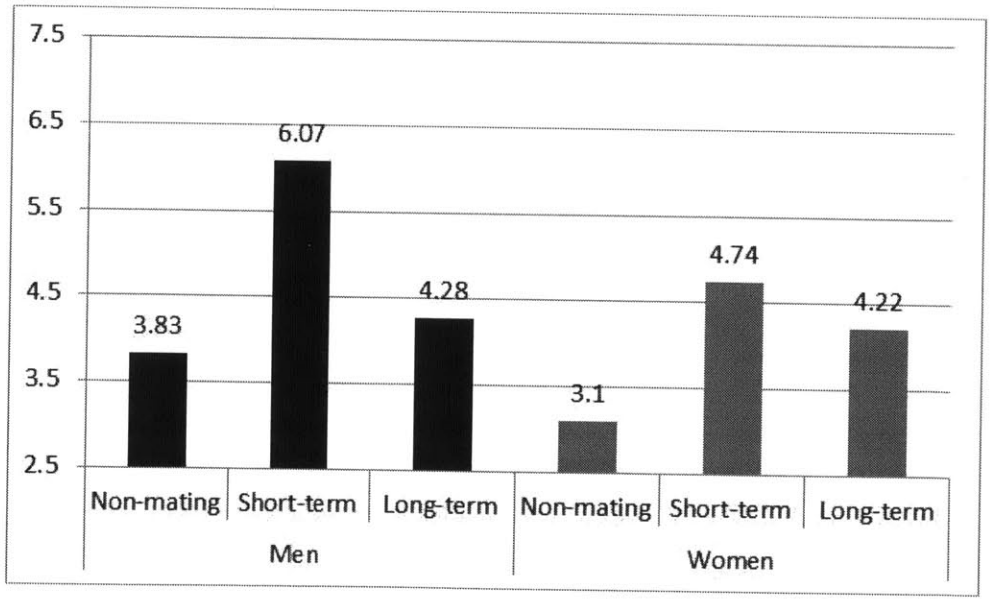

Figure 3-3: Men's and women's sensitivity to errors of omission depending on type of prime

Variety Seeking

The results of the ANOVA shown in Figure 3-4 indicated that male participants in the short-term mating condition exhibited more variety seeking behavior than those in the non-mating condition. However, male participants in the long-term mating condition exhibited less variety seeking behavior than those in the non-mating condition. The differences were not significant across the three conditions ($M_{\text{short-term}} = 3.93$, $M_{\text{long-term}} = 3.28$, $M_{\text{control}} = 3.60$; all $ps > .1$). Therefore, hypothesis 1 was not supported. On the other hand, the results showed that female participants in the long-term mating condition exhibited more variety seeking behavior than those in the short-term mating or the non-mating condition. However, these differences were not significant too ($M_{\text{long-term}} = 3.84$, $M_{\text{short-term}} = 3.74$, $M_{\text{control}} = 3.20$; all $ps > .1$). Hence, hypothesis 2 was not supported.

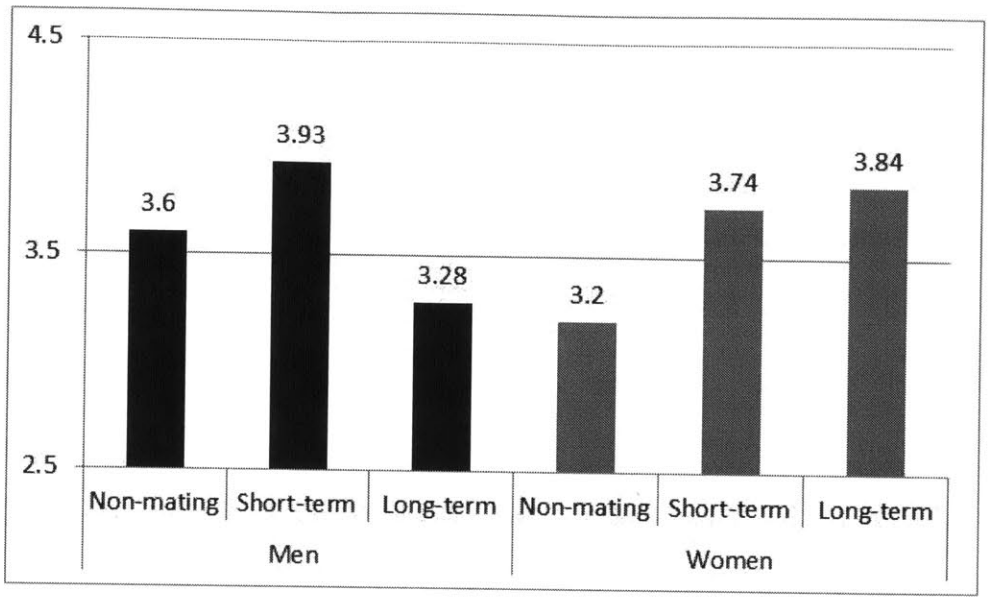

Figure 3-4: Men's and women's variety seeking tendencies depending on type of prime

Supplementary Analysis

The results of regression analyses showed that participants' age, real relationship status, and number of children did not significantly predict creativity or variety seeking tendency (all *ps* > .1).

3.3 Discussion of Study 1

The results of study 1 demonstrate that female consumers in a long-term mating mindset did exhibit more variety seeking behavior than those in a non-mating or a short-term mating mindset. Although the results were in the right direction, they were not statistically significant. Furthermore, we find that male

participants in a short-term mating mindset did exhibit more variety seeking behavior than those in a non-mating mindset. However, the difference was not statistically significant. In addition, male participants in a long-term mating mindset exhibited less variety seeking behavior than those in a non-mating mindset. This result was neither consistent with our hypotheses nor statistically significant. One possible explanation for the inconsistent findings and the lack of insignificance is that the content of the scenarios that we used to prime a mating or non-mating mindset might confound the results observed. For instance, participants in the control condition were asked to imagine getting ready to go to a much-anticipated concert with a same-sex friend. During the night of the show, participants imagined that they could not find the tickets. However, the scenario has a happy ending as the friend shows up with the tickets, and they both head off in a great mood anticipating a delightful musical experience. Although the content of this story do successfully avoid inducing any thoughts about mating, it is indeed about variety seeking behavior. For example, in the story, the main character can't find the tickets, so he/she searches everywhere (e.g., the drawers, the backpack, the folders, the laundry, the kitchen, the driveway, the grass, the cars, etc.). This description could boost participants' variety seeking tendency, which might be the reason why we find that participants in the non-mating condition still showed a high level of variety seeking tendency.

Furthermore, in the mating conditions, participants were asked to imagine meeting a highly attractive classmate of the opposite sex on campus after class (the long-term mating condition) or a highly attractive stranger of the opposite sex during the last day of vacation on an exotic island (the short-term mating condition). The differences in participants' perceived familiarity with the imagined mate (their classmate versus a stranger who they don't know) and the location (their school campus versus an exotic island) depicted in the scenarios could lead to different choice strategies adopted by men or women (e.g., being open-minded or conservative). This might be the reason why both male and female participants in the short-term mating condition showed increased variety seeking tendency. On the other hand, for a male participant, the short-term mating scenario emphasizes that he and the attractive woman would likely never see each other again; whereas the long-term story emphasizes that the two people have gone out on several more spectacular dates after the first wonderful encounter. The male participant then imagined that he is sure that he would like to start a meaningful relationship with this desirable woman, and he thinks the woman feel the same way. This description of the long-term scenario might trigger not only a mate acquisition motive but also a mate retention motive. Prior research suggests that preference for variety and novelty might be decreased by a mate retention motive (Griskevicius and Kenrick 2013). Hence, this might account for why male participants in the long-term mating condition exhibited less variety seeking behavior than those in the short-term mating or the non-mating condition. In addition, we find that the patterns for participant's

creativity were inconsistent with those found in prior research (Griskevicius et al. 2006). One possible explanation is that we measured creativity with the self-reported questions. Participants might have a tendency to answer the questions in a manner that will be viewed favorably by others (i.e., the more creative, the better) regardless of whether they were induced to think about mating.

Chapter 4

Study 2

The purpose of this study is to replicate our tests of the hypotheses from study1 using different types of mating mindset manipulations and measures. The objective of the change is to rule out the potential alternative explanations and to remedy the limitations found in study 1.

4.1 Methods for Study 2

4.1.1 Design and Participants

Hypotheses 1 and 2 were tested using a 2 (gender: male versus female) × 3 (mindset: non-mating versus short-term mating versus long-term mating) between-subjects design. A total of 142 participants (59.40% males and 39.90 % females; age range from 18 to 65 years) were recruited through Amazon Mechanical Turk. Each male or female participant was randomly assigned to one of the three mating mindset conditions.

4.1.2 Mating Primes

To manipulate a mating mindset, in the long-term (short-term) condition, participants were asked to imagine themselves as single. They are looking for the type of romantic partner who would be desirable in a committed long-term (an uncommitted short-term) relationship, and they happen to meet an attract opposite-sex person who is also looking for a committed long-term (an uncommitted short-term) romantic partner. Participants were then given up to three minutes to write down their answer about the ideal behavioral interactions that they would like to have in order to form a committed long-term (an uncommitted short-term) relationship with this attractive person. To manipulate a non-mating mindset, participants in the control condition were asked to imagine they are about to go out for a walk on a beautiful street with no other people on it currently. They were then given up to three minutes to write down their answer about the ideal weather conditions in which to walk around and look at the trees and buildings. After completing the writing task, participants indicated to what extent they were experiencing sexual arousal, romantic arousal, positive mood, and negative mood on eight-point scales with the endpoints at 1 (not at all) and 8 (very much). Next, participants were administered the main dependent variables.

4.1.3 Dependent Measures

Participants were asked to imagine that they were buying exactly four scoops of ice cream for immediate, personal consumption. Available flavors were chocolate, strawberry, coffee, and vanilla. Participants were asked to decide which flavor they would like to have, and they could choose different flavors every week, the same flavor every week, or anywhere in between). We measured variety seeking by counting the number of flavors that each participant chose at least once. As in study 1, sensitivity to errors of omission was measured by asking participants to indicate to what extent they tended to be open-minded for the sake of embracing unfamiliar flavors they might like. Sensitivity to errors of commission was measured by asking participants to indicate to what extent they tended to be conservative for the sake of avoiding unfamiliar flavors they might not like. Next, to measure participants' creativity, we asked them to complete the idea-generation task (Fitzsimons, Chartrand, and Fitzsimons 2008). In this task, they were told to generate and write down as many creative uses for a brick as they could think of in 2 minutes. They were also asked not to list either typical uses (e.g., build a wall) or uses that are virtually impossible (e.g., eat it as food). Finally, participants' tendencies to have casual, uncommitted sexual relationships was measured with a seven-item Sociosexual Orientation Inventory (SOI). Also, participants responded to questions asking about their background and chronic traits (e.g., age, relationship status, perspective-taking, openness, etc.) and an open-ended

question that asked what they thought the study was about (suspicion probe). Upon completion of the questionnaires, they were debriefed and thanked.

4.2 Results for Study 2

4.2.1 Manipulation Check

Romantic and Sexual Arousal

The results of the ANOVA indicated that the mating mindset manipulations were successful. Compared with participants in the non-mating condition, those who read the mating scenarios reported significantly more romantic arousal (M_{mating} = 4.46, $M_{control}$ = 1.67; $F(1,140) = 80.50$, $p < .001$) and sexual arousal (M_{mating} = 3.80, $M_{control}$ = 1.40; $F(1,140) = 52.68$, $p < .001$). The results also indicated that there were no significant differences in romantic arousal (*M*s between 3.78 and 5.33; all *p*s > .1) or sexual arousal (*M*s between 2.88 and 4.41; all *p*s > .1) across the two mating scenarios for male or female participants

Mood

The results of the ANOVA showed that both male and female participants in the three mindset conditions were experiencing highly positive mood (*M*s

between 5.89 and 6.82), and none of the conditions produced much negative mood (*M*s between 2.29 and 3.05). In addition, there were no significant differences in positive or negative mood across the three conditions (all *p*s > .1).

4.2.2 Creativity and Variety Seeking

Creativity

We measured creativity by computing the number of creative ideas generated (Eisenberger, Armeli, and Pretz 1998; Glover and Gary 1976; Silvia and Phillips 2004). As predicted, the results of the ANOVA showed that male participants in the two mating conditions generated a higher number of creative uses than did those in the non-mating condition; however, the differences were not significant ($M_{\text{short-term}} = 5.74$, $M_{\text{long-term}} = 5.52$, $M_{\text{control}} = 4.48$; all *p*s > .1; Figure 4-1). For female participants, the number of creative uses generated in the short-term condition was the same as that generated in the long-term condition; the number of creative uses generated in the two mating conditions was higher than that in the control condition. However, none of the differences was significant ($M_{\text{short-term}} = 5.47$, $M_{\text{long-term}} = 5.47$, $M_{\text{control}} = 5.00$; all *p*s > .1; Figure 4-1).

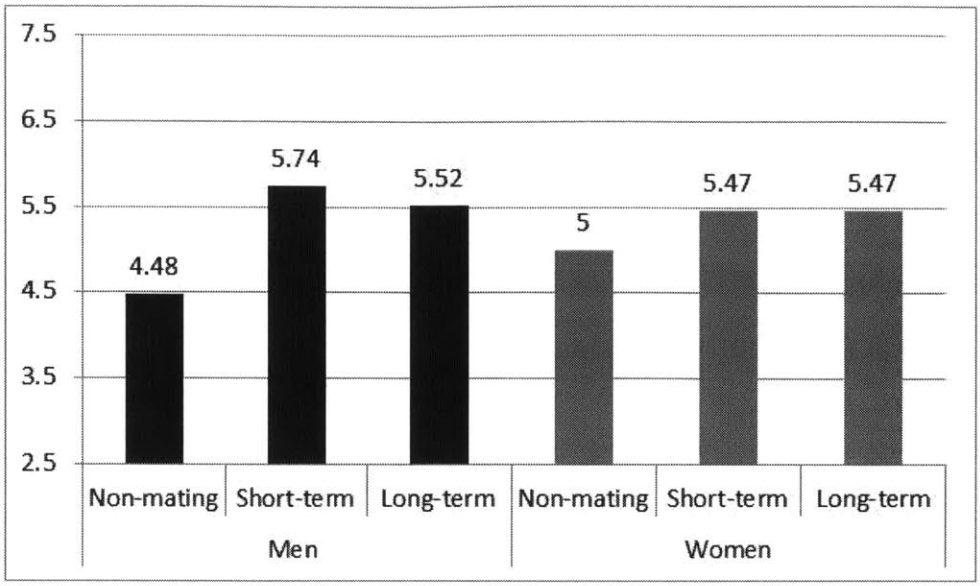

Figure 4-1: Men's and women's creativity depending on type of prime

Sensitivity to Errors of Commission and Omission

As shown in Figure 4-2 and Figure 4-3, the results of the ANOVA indicated that for male participants, as expected, those in the two mating conditions scored higher on sensitivity to errors of omission than those in the non-mating condition. However, only the difference between the long-term mating condition and the non-mating condition was significant ($M_{\text{long-term}} = 5.04$, $M_{\text{control}} = 3.42$; $p < .05$; $M_{\text{short-term}} = 4.59$, $M_{\text{control}} = 3.42$, $p > .1$). In addition, male participants in the two mating conditions scored lower on sensitivity to errors of commission than those in the non-mating condition, but none of the differences was significant ($M_{\text{short-term}} = 4.67$, $M_{\text{long-term}} = 3.96$, $M_{\text{control}} = 5.16$; $p > .1$). On the other hand, as predicted, for female participants, those in the long-term mating condition scored higher on sensitivity to errors of omission than those in the

short-term mating or the non-mating condition, but the differences were not significant across the three conditions ($M_{long\text{-}term}$ = 4.89, $M_{short\text{-}term}$ = 4.12, $M_{control}$ = 4.05; all *ps* > .1). In addition, female participants in the long-term mating condition scored lower (higher) on sensitivity to errors of commission than those in the non-mating (short-term mating) condition. The differences were not significant across the three conditions too ($M_{long\text{-}term}$ = 4.58, $M_{short\text{-}term}$ = 3.41, $M_{control}$ = 4.67; all *ps* > .1).

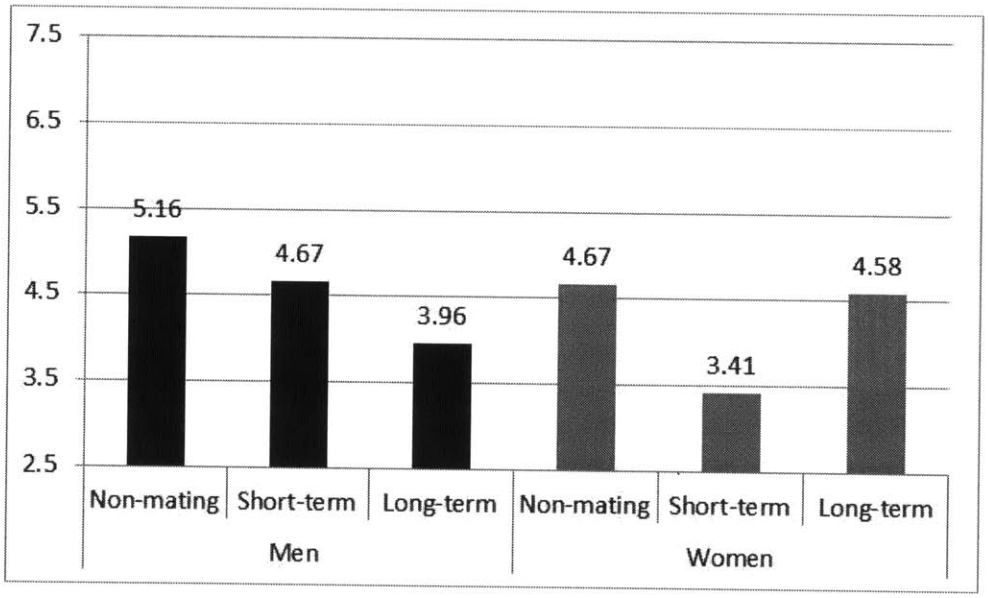

Figure 4-2: Men's and women's sensitivity to errors of commission depending on type of prime

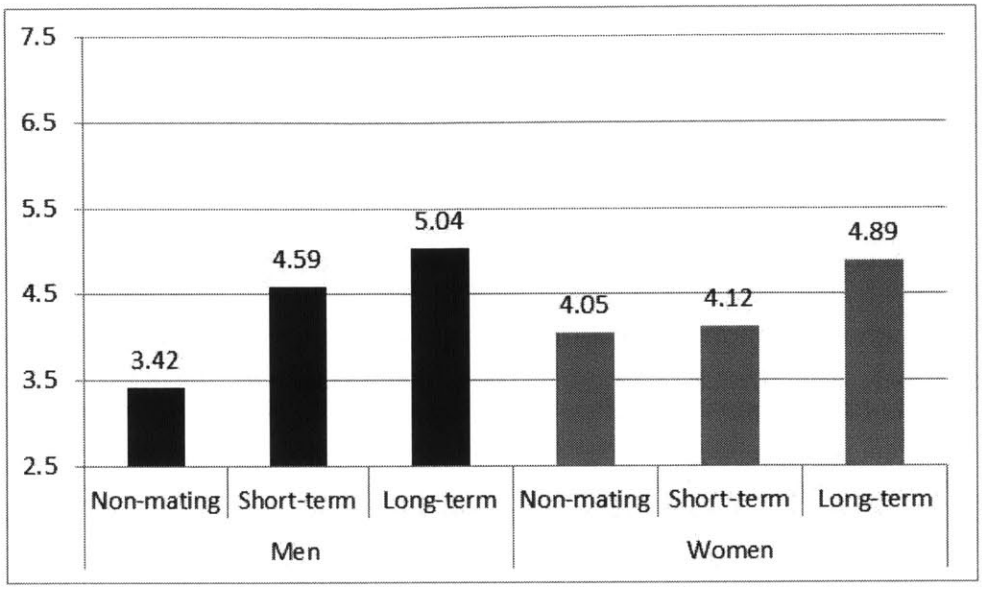

Figure 4-3: Men's and women's sensitivity to errors of omission depending on type of prime

Variety Seeking

As expected, the results of the ANOVA shown in Figure 4-4 indicated that male participants in both the short-term and the long-term mating condition exhibited more variety seeking behavior than those in the non-mating condition; but only the difference between the long-term condition and the non-mating condition was significant ($M_{\text{long-term}} = 2.74$, $M_{\text{control}} = 2.23$; all $p < .05$; $M_{\text{short-term}} = 2.59$, $M_{\text{control}} = 2.23$, $p > .1$). Therefore, hypothesis 1 was partially supported. For female participants, those in the long-term mating condition exhibited more (less) variety seeking behavior than those in the non-mating (short-term mating) condition; but, these differences were not significant ($M_{\text{long-term}} = 2.63$, $M_{\text{short-term}} = 2.65$, $M_{\text{control}} = 2.29$; all ps $> .1$). Hence, hypothesis 2 was not supported.

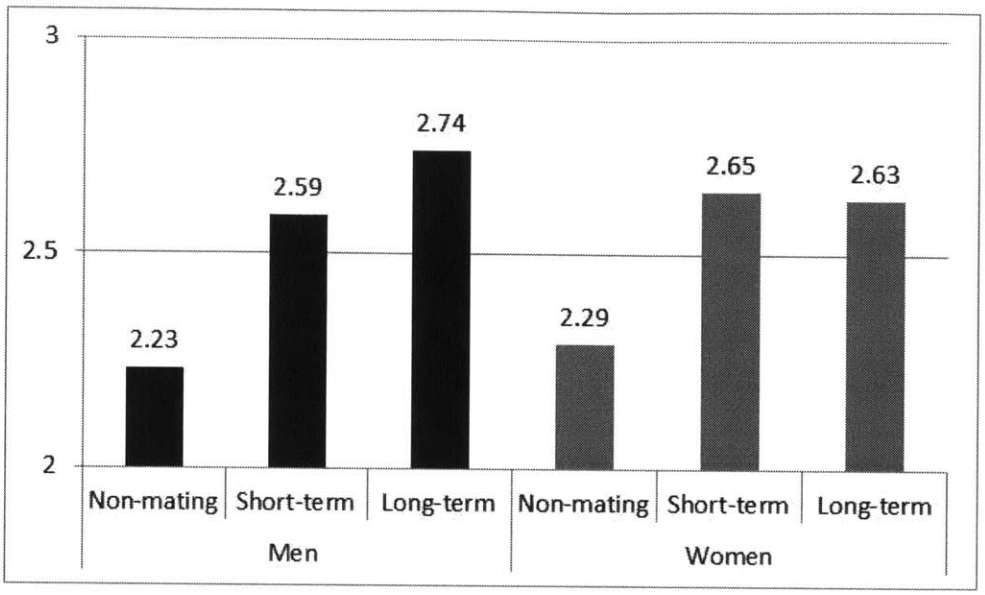

Figure 4-4: Men's and women's variety seeking tendencies depending on type of prime

Supplementary Analysis

The results of regression analyses showed that participants' real relationship status, number of children, SOI, perspective taking, and openness did not significantly predict creativity or variety seeking tendency (all *ps* > .1). The results also showed that participants were not suspicious of the real purpose of the study.

4.3 Discussion of Study 2

The results of study 2 partially support our hypotheses. As expected, we find that male consumers in a long-term mating mindset showed more boosts in creativity and variety seeking tendency than those in a non-mating mindset.

However, for female consumers, the long-term mating prime did not significantly increase their creative displays and variety seeking behavior. Also, the results show that both the short-term and the long-term mating primes triggered similar levels of creative displays and variety seeking behavior for female participants. This result is inconsistent with both our hypotheses and the findings of prior research which suggest that women are less likely to engages in creative display to impress the a potential short-term mate (Kenrick et al. 1990). One plausible alternative explanation for the inconsistent findings is that our short-term mating prime manipulation in study 2 may have been insufficient to reach the threshold for female participants' consideration of potential parental costs. Specifically, in our short-term mating condition, participants were asked to imagine that they are looking for the type of romantic partner who would be desirable in an uncommitted short-term relationship, and they happen to meet an attractive opposite-sex person who is also looking for an uncommitted short-term romantic partner. Participants were then asked to write down their answer about the ideal behavioral interactions that they would like to have in order to form an uncommitted short-term relationship with this attractive person. In their answers, many male participants mentioned "having casual sex." However, there was only one female participant who mentioned this. Most female participants' answers focused on personalities or hobbies of the desirable short-term romantic partner. This result implies that our short-term mating prime might not induce female participants to think about having casual sex and potential parental cost. As a result, female participants became more willing to engage in

creative display to impress the imagined short-term mate. This could account for why female participants in a short-term mating mindset also showed boosts in creativity and variety seeking tendency.

Chapter 5

General Discussion

Our findings show that mating mindsets are a crucial determinant of variety seeking tendency. Our hypotheses are partially supported in the studies employing different types of mating mindset manipulations and measures. The results also provide evidence regarding the psychological processes responsible for the effects of mating mindsets. We find that male consumers in a long-term mating mindset showed more boosts in sensitivity to errors of omission than those in a non-mating mindset. Consequently, when facing a choice that involves the simultaneous selection of multiple items, male consumers in a long-term mating mindset sought greater variety in product choices than those in a non-mating mindset. Interestingly, we also find similar patterns of results for female consumers in the studies although the differences were not statistically significant. Our hypotheses suggest that female consumers are more creative and sensitive to errors of omission only when the mating prime requires them to think about long-term relationships. However, we find that when female consumers were primed with either the short-term or the

long-term mating cues, they showed similar levels of boosts in creativity, sensitivity to errors of omission, and variety seeking tendency. One possible explanation for this result is that our short-term mating cues did not induce female participants to think about potential parental costs (Trivers 1972). In other words, if a short-term mating prime is insufficient to reach the threshold for female participants' consideration of potential parental cost, it is possible that female participants in the short-term mating condition still increase their displays of creativity and, thus, show boosts in their variety seeking tendencies.

5.1 Theoretical and Managerial Contributions

Prior research has identified a number of factors that influence consumer variety seeking behavior (Ariely and Levav 2000; Kahn and Isen 1993; Kahneman and Snell 1990; Ratner and Kahn 2002; Read and Loewenstein 1995; Simonson 1990). Our results demonstrate that mating mindsets are important in determining variety seeking tendency. To our knowledge, the current research is the first to introduce evolutionary theories to the area of variety seeking. Our findings also contribute to an emerging stream of research that examines how evolutionary psychology can impart insights into consumer behavior (Dahl, Sengupta, and Vohs 2009; Griskevicius et al. 2009; Monga and Gürhan-Canli 2012). Prior research in psychology has shown that mating mindsets can significantly influence aggression, compliance, and willingness to buy conspicuous and benevolent products (Griskevicius et al. 2006;

Griskevicius et al. 2007; Griskevicius et al. 2009; Iredale, Van Vugt, and Dunbar 2008). The current research adds to this line of research by showing that mating mind-sets can affect variety seeking behavior.

In addition, this research makes significant contributions in advancing managerial knowledge. In the marketplace, it is common that products are sold as a variety pack (versus a single flavor pack, e.g., potato chips, popcorns, beers, sodas, etc.). Our findings suggest that managers and marketers could manipulate mating mindsets to elicit more favorable product evaluation and higher willingness-to-buy among consumers. For instance, firms could advertise their new variety pack products on dating websites or introduce their variety pack products during periods when consumers' mating mindsets are likely activated (e.g., Valentine's Day). In addition, some firms and their products are positioned with respect to mating themes or are often associated with romantic relationships. For instance, wedding firms are often associated with committed long-term romantic relationships (e.g., marriage); whereas pubs or bars are often associated with uncommitted short-term relationships (e.g., a one-night stand). According to our findings, wedding firms may have an advantage in introducing their variety pack products (e.g., wedding planning packages) to male consumers.

5.2 Limitations and Future Research

Although this research yields several important findings, it is not without limitations. First, our short-term mating prime manipulation in study 2 may have been insufficient to reach the threshold for female participants' consideration of potential parental costs. Future studies could add a new short-term mating condition in which participants are induced to clearly think about having casual sex or parental costs. We expect that female participants in this short-term mating condition will not show boosts in creativity and variety seeking tendency. Second, although the choice of ice cream as the target product in studies 1 and 2 allows us to generalize our findings to nondurable and less expensive consumables, replication of our findings using durable and more expensive products is called for. Third, although our use of a fictitious choice task (e.g., choosing ice cream flavors) allows for strict control and helps us rule out confounds, we cannot examine consumers' responses in a real-world situation. Hence, future research can replicate our findings in a real shopping setting (e.g., romantic movies and consumers' popcorn choices). Finally, the fact that people selecting a long-term mate are especially focused on and sensitive to the trustworthiness and commitment levels of the romantic partner (Griskevicius et al. 2006) suggests that whether variety seeking behavior in product choices (e.g., brand disloyalty) is a signal of disloyalty to a potential mate would be another interesting question to pursue in future research.

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