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The Influence of Activated Short-term Mating Goals on Men's and Women's Domain-specific Mating Self-efficacy

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The University of Southern Mississippi

The Influence of Activated Short-term Mating Goals on Men's and Women's Domain-specific Mating Self-efficacy

by

Nathaniel Horton

A Thesis
Submitted to the Honors College of
The University of Southern Mississippi
in Partial Fulfillment
of the Requirement for the Degree of
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Abstract

Men and women are motivated to identify and procure mating opportunities that would best facilitate the survival and long-term reproductive success of their offspring. In the current study, we hypothesized that when primed with mating interest, men and women would report greater self-efficacy in behavioral domains that would be attractive to the opposite sex. Men and women were randomly assigned to a mating or control prime condition, then completed a self-efficacy scale tapping into behaviors related to physical attractiveness enhancement, dominance, and status; participants also completed a scale assessing their level of intrasexual competitiveness. It was predicted that men primed with mating would report greater self-efficacy in the domains of dominance and status compared to men in the control condition. Women, on the other hand, were expected to report greater self-efficacy in the domain of physical attractiveness enhancement compared to women in the control prime condition. The effects of the mating prime on self-efficacy enhancement were expected to be especially pronounced for those higher in dispositional intrasexual competitiveness. This study found partial support for study hypotheses. Women primed with mating reported greater attractiveness self-efficacy than those in the control prime condition. Additionally, men and women higher in intrasexual competitiveness reported higher mating self-efficacy in the domains of dominance and attractiveness. Surprisingly, women primed with mating reported elevated self-efficacy in the domain of status acquisition compared to women in the control prime condition. Men, regardless of condition, reported higher mating self-efficacy across domains relative to women.

Key Words: self-efficacy, mating, domain-specific, adaptive, evolutionary psychology

Dedication

To my wife, Charlie:

Thank you for your constant support and help.

To my parents:

Thank you for instilling in me a love for learning.

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I would like to especially thank my adviser, Don Sacco, for his innumerable efforts in guiding me throughout the process of completing this study. None of this would have been possible without him, and I will forever appreciate the time and knowledge he invested in me. Thank you, Don.

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Introduction

Human survival depends on successful reproduction. Effectively reproducing ensures men and women that their genes are represented in subsequent generations. Nonetheless, reproduction remains a competitive endeavor. Heterosexual men and women are motivated to obtain the highest quality mating partners possible, because this increases the probability that their offspring will survive and successfully reproduce. Importantly, men and women have come to desire different traits and behaviors in mating partners, which would optimize the heritable fitness of, and parental care for, resultant offspring (e.g., Buss & Schmitt, 1993; Kenrick, Groth, Trost, & Sadalla, 1993; Li & Kenrick, 2006; Li et al., 2013; Trivers, 1972). As such, it is adaptive for men and women to communicate high levels of traits and behaviors considered desirable by opposite-sex mating partners to outcompete same-sex conspecifics for the most valued mating opportunities. It becomes incumbent on that individual to demonstrate their mate value to opposite-sex individuals competently, but demonstration of one's mate value may be contingent on their current perception of their capability to demonstrate that value effectively.

Successful mate attraction may have basis in *mating self-efficacy*, a form of self-efficacy (Bandura, 1997) specifically tied to perceptions of oneself as possessing requisite mate value for attraction that demonstrate competence in relevant mating domains to a partner. If one were particularly motivated to acquire a mate, it might be advantageous to perceive oneself as possessing desirable traits and behavioral competencies, as that would instill confidence in one's ability to be a desirable mate. Thus, it would propel that individual toward engaging prospective mates, and facilitate

more favorable intrasexually competitive outcomes. In the current study, we argue that the activation of mating goals, particularly short-term mating goals, should lead men and women to report higher self-efficacy in trait and behavioral domains valued by opposite sex mating partners. Because self-efficacy is related to greater likelihood of behaving in ways that facilitate goal acquisition, these temporary changes in self-efficacy should facilitate the enactment of behaviors that would demonstrate mate value in domains desired by opposite sex mating partners.

While past research documents mating related changes in the display of certain traits and behaviors (Ainsworth & Maner, 2012, Griskevicius et al., 2007, Durante, Li, & Haselton, 2008), considerably less research exists concerning the potential factors that account for such amplified self-evaluation. Roney (2003) suggests that mating goals lead to higher levels of agency, which could facilitate such strategic self-enhancement, but this hypothesis is not tested in his study. Indeed, while several studies have observed the behavioral effects that follow activated mating goals, no study has tested a causal factor for these behavioral changes. In the current study, we test the hypothesis that this causal factor is self-efficacy. This hypothesis is based on the evidence of self-efficacy's direct link to goal attainment, that it can be inflated on a short-term basis, and that such a manipulation in mating scenarios could be an evolutionary adaptation, as it would directly affect offspring production.

Literature Review

Sex Differences in Human Mating Strategies

To attract potential mates, heterosexual men and women adopt a variety of strategies which help them achieve their goal. Specifically, people try to appear desirable in traits and behaviors that the other sex values in a mating partner. However, per Trivers (1972), fundamental differences in the reproductive biology of men and women have shaped how each sex pursues reproduction, and consequently, the traits they value in potential mating partners. The valuation of different traits and behaviors is rooted in parental investment theory. That is, the sex that invests more resources in the offspring of a given species will be more judicious in selecting a mating partner. In humans, reproduction is significantly more metabolically costly for women than it is for men. To create a viable offspring, the mandatory minimum investment for men is provisioning sperm to fertilize the female egg, a less-costly process, as men's testes produce millions of sperm each day and men can fertilize another female egg shortly after a single act of copulation. Conversely, women are born with all their eggs, and cannot generate additional eggs over the course of their lifespan; some eggs are nonviable, and others are damaged by environmental toxins over the lifespan, further reducing the available number of eggs for fertilization. Additionally, each act of reproduction removes women from the mating pool for approximately a year, and women must expend additional calories during pregnancy and when nursing to facilitate offspring survival (Trivers, 1972).

Because reproduction is far more biologically expensive for women than men, and because women's reproductive rate is slower than men's, this produces sex differences in

the traits and behaviors that men and women prefer, consistent with navigating reproductive challenges. For women, offsetting the costs of reproduction requires identifying high quality mates likely to produce healthy offspring, as well as mates willing to invest resources in her and her offspring (Buss, 1989). Thus, women tend to prefer men who communicate phenotypic health (e.g., symmetry; Grammer & Thornhill, 1994; Simpson, Gangestad, Christensen, & Leck, 1999) as well as higher status (e.g., Buss & Schmitt, 1993), which is a cue to resource access. Given this communicated preference, men would benefit by experiencing higher self-efficacy in domains pertaining to physical fitness or status. Such self-efficacy may indicate affordance for these men to engage women whom they find desirable. Specifically, this would include perceiving oneself as more attractive than other men (e.g., confidence in physical strength; Frederick & Haselton, 2007) as well as being able to attain status, which may involve demonstrating dominance over other men (e.g., Ainsworth & Maner, 2012) or wealth (e.g., conspicuous consumption; Griskevicius, Tybur, Sundie, Cialdini, Miller, & Kenrick, 2007). These men would become more likely to enact the behaviors that would facilitate success in the domains that women value. Insofar as men are only limited reproductively by the ability to identify multiple attractive and fertile mates, men tend to prefer women who are youthful (a sign of fertility), attractive (good genes), and sexually receptive (a cue of reproductive opportunity; Kenrick, Groth, Trost, & Sadalla, 1993). As such, women may benefit by communicating these qualities to high quality male conspecifics, to outcompete other women for these valuable mating opportunities (e.g., Buss, 1989; Wade & Feldman, 2016).

There is growing evidence that men and women tend to accentuate behaviors and traits that the opposite sex deems desirable, particularly when mating goals are salient. Women at peak fertility tend to dress more provocatively (relative to their culture) than during the non-fertile phase of the ovulatory cycle, in order to appear more attractive than other female conspecifics to high quality male partners (e.g., Durante, Lee, & Haselton, 2008; Elliot & Pazda, 2012; Haselton, Mortezaie, Pillsworth, Bleske-Rechek, & Frederick, 2007). Additionally, ovulating women have been shown to use more pronounced walking gaits and to walk slowly in front of men as a means of appearing attractive and sexually receptive (Guéguen, 2012). These altered behaviors are perhaps generally explained by the increased sexual desire that women experience when they are at peak conception risk (Gangestad, Garver-Apgar, Simpson, & Cousins, 2007). Importantly, this flirtatious behavior is more strongly exhibited when these women are interacting with men of higher mate value (Cantú, Simpson, Griskevicius, Weisberg, Durante, & Beal, 2013). Thus, mating goals lead women to communicate their physical attractiveness and sexual availability to men, so as to outcompete other women for high quality mating opportunities. The consequentially activated mating motive during ovulation may also bolster their self-perceptions of actual mate value such that it provides motivation for subsequent cross-sex interactions. This idea of bolstered self-perception is further justified by research indicating that women also experience shifts in attractiveness across the cycle, including facial (e.g., Roberts et al., 2004) and vocal attractiveness (e.g., Pipitone & Gallup, 2008) as well as a shift in body fat distribution (Zaadstra et al., 1993). It could be the case that in recognizing their shifts in attractiveness during the cycle, their

coinciding heightened interest in mating may yield higher levels of self-efficacy in mating domains.

Conversely, men primed with mating goals demonstrate greater unprovoked aggression towards other men as a means of establishing dominance over male competitors (Ainsworth & Maner, 2012; Griskevicius, Tybur, Gangestad, Perea, Shapiro, & Kenrick, 2009). Additionally, men primed with mating motives also demonstrate a greater willingness to spend money on conspicuous luxuries, but not necessities, as a means of communicating their status through access to resources (Griskevicius et al., 2007; Sundie, Kenrick, Griskevicius, Tybur, Vohs, & Beal, 2011). Even mere visual exposure to women causes men to exaggerate their personality in domains more desirable to women, including dominance, monetary success, ambition, etc. (Roney, 2003). Being in an intrasexually competitive environment motivates actions from men that not only demonstrate their comparative superiority vis-à-vis competitors, but also communicates perceived status and dominance, as desired by heterosexual women. Rising to the occasion against intrasexual competition may necessitate men to bolster their perceptions of self-competence, which could improve their ability to compete, and thus cause them to be deemed attractive by women.

While past research documents these mating related changes in the display of certain traits and behaviors, there is much less research on the potential factors that account for inflated self-evaluation. Roney (2003) suggests that mating goals lead to higher levels of agency, thus facilitating such strategic self-enhancement. In the current study, we test the hypothesis that mating goals lead men and women to demonstrate temporarily enhanced self-efficacy in domains that opposite sex conspecifics would find

attractive, as a means of facilitating the actual acquisition of these desired traits and behaviors. Because higher self-efficacy is related to a greater likelihood of successful behavior in a given domain (Locke, Frederick, Lee, & Bobko, 1984), one route by which mating goals may increase adaptive behaviors in specific domains (dominance, attractiveness) is by increasing individuals' self-efficacy in those domains.

For example, priming men with mating may augment their self-efficacy in domains related to mating success. That is, men may perceive themselves as being more capable of being dominant or attaining higher status over other men, which would facilitate the actual behaviors necessary for dominance and status acquisition that would ostensibly lead to greater mating opportunities. Priming women with mating may temporarily augment their self-efficacy in being more attractive than other women, thus leading them to engage in behaviors necessary for being more attractive (greater confidence in their ability to move or dress in ways that would make them more attractive to men than other women).

Adaptive Utility of High Self-efficacy

Self-efficacy refers to the belief in one's capabilities in the organization and execution of any course of action required to attain relevant goals (Bandura, 1997). It can be generalized that having high self-efficacy is beneficial to a person, while low self-efficacy hinders goal attainment. This is because high self-efficacy provides an environment conducive for success in endeavors by boosting a person's motivation, task persistence, and frustration tolerance (Gecas, 1989; Hutchinson, Sherman, Martinovic, 2008). By continually putting forth effort at a task, those higher in self-efficacy will ultimately be more likely to identify the right behavior (e.g., most adaptive) to facilitate

attainment of goals. Those lower in self-efficacy are more likely to concede to challenge, thereby possibly never enacting the behavior that would facilitate goal attainment (Bandura, 1997).

Empirical research has continuously demonstrated that self-efficacy directly correlates with performance via this process in both cognitive and physical realms. A meta-analysis of the relation between self-efficacy beliefs and academic achievement found that high self-efficacy directly correlated with high achievement, such that recognizing what was conducive for academic success, and subsequently identifying with it, bolstered achievement (Multon, Brown, & Lent, 1991). A more recent study connected high self-efficacy levels with successful decision-making in sports (Hepler, 2016). Additionally, higher self-efficacy is associated with enhanced performance in various sports (Feltz, Short, & Sullivan 2008). This link between high efficacy and goal-attainment has also been intensively mapped out by Bandura (1997) in his extensive research on the subject. This well-documented connection strongly supports the idea that high self-efficacy is adaptive.

Mating Goals and Domain-specific Increases in Self-efficacy

While general self-efficacy is adaptive insofar as it facilitates successful goal attainment, mating goals should lead to enhanced self-efficacy specifically for domains relevant for satisfying mating. For example, given that men desire women who are high in physical attractiveness and sexual receptivity, it would not behoove women to demonstrate greater efficacy in their ability to be dominant over other women. Because sexual selection has not resulted in a male mate preference for dominant females, even if higher dominance efficacy did result in a female dominating over other female

conspecifics, this effort would be wasted because the behavioral display is generally not valued by male suitors. Given the fact that all biological organisms have limited metabolic resources to invest in goals related to survival and reproduction (Kaplan & Gangestad, 2005), it would be maladaptive to misuse these resources on activities that would not be in the service of goal attainment. Thus, when mating goals are salient, men and women should demonstrate enhanced efficacy only in domains that would facilitate the expression of behaviors and traits that would enhance their reproductive opportunities.

The Moderating Role of Intrasexual Competitiveness

While both men and women desire to be more attractive to mates than other same-sex conspecifics, research suggests that there are individual differences in the extent to which men and women view same-sex conspecifics as intrasexual threats (Buunk & Fisher, 2009). Intrasexual competitiveness is driven by the goal of attracting potential mates, and leads to competition with same-sex conspecifics in domains desired by the opposite sex. Importantly, individual differences in intrasexual competitiveness have been linked to differences in the use of behaviors to demonstrate and draw others' attention to one's superior status, dominance, access to resources, and physical appearance (Walters & Crawford, 1994). That is, those higher in intrasexual competitiveness demonstrate a greater desire to outcompete same-sex conspecifics and communicate to opposite-sex conspecifics their prowess in these domains. Thus, those higher in dispositional intrasexual competitiveness should be especially prone to higher mating self-efficacy in these domains when mating goals are salient.

Present Research

The present research aimed to discover the role of self-efficacy in mating-related goal attainment. Three primary hypotheses were tested in the current research study.

Hypothesis 1: Men primed with mating will report greater mating self-efficacy in domains related to being more dominant than other males and being capable of attaining greater status than other males. Priming women with mating is not expected to influence self-efficacy in dominance and status domains.

Hypothesis 2: Both men and women primed with mating will report greater self-efficacy in the context of being more physically attractive than same-sex peers. However, given the primacy of physical attractiveness in men's selection of women, this effect is expected to be larger for women.

Hypothesis 3: The impact of mating goals with respect to Hypothesis 1 and 2 should be larger for men and women who self-report being higher in intrasexual competitiveness (IC).

Methodology

Participants

We recruited 216 participants via Amazon's Mechanical Turk survey platform to complete study procedures, and compensated them US \$0.35 for their participation. However, 19 participants were removed from the primary analyses for any one of the following reasons: 1) they did not report their sex, 2) they were older than 40 years of age, 3) they reported non-heterosexual orientation, or 4) they failed to complete study questionnaires. As such, the final sample included 197 participants (93 men, 104 women; Mean Age=29.94 years, SD=5.56 years). Importantly, there were at least 40 participants per between-subjects condition (44 men in the mating prime condition, 49 men in the control condition, 52 women in the mating condition, 52 women in the control condition). Thus, the sample was adequately powered to test all experimental hypotheses.

Materials and Procedure

Potential participants viewed the study description, which indicated that the research was interested in reading comprehension and behavior. The description also indicated that participants were required to be heterosexual, willing to report their biological sex, and between the ages of 18-40 years. Participants who consented to study procedures (see Appendix A for consent form) were redirected to the survey, hosted via Qualtrics; those uninterested in participating were asked to close their browser window. Before priming, participants were asked to report their biological sex. Based on their responses, participants were redirected to the appropriate primes and scales for their respective sex (i.e., male participants responded to questions about female mates and male rivals and female participants responded to male mates and female rivals).

Following this branching, participants were randomly assigned to one of two conditions. We programmed the survey to assign participants randomly between “Condition 1” and “Condition 2,” with Condition 1 directing the participant to the experimental condition, and Condition 2 directing to the control condition. In the experimental condition, participants engaged in the mating prime induction that consisted of reading a romantic scenario that was designed and confirmed by Griskevicius and colleagues (2007) to elicit sexual arousal. Specifically, participants were instructed to imagine spending a day with a person whom they highly desired as a romantic partner of the opposite sex (Griskevicius et al., 2007; see Appendix B-1 for the prime read by female participants and B-2 for the prime read by male participants). The control group was instructed to imagine preparing to attend an exciting concert with a friend of the same sex, creating a highly positive feeling without eliciting the romantic aspect of the experimental group's prime (Griskevicius et al., 2007; see Appendix C). That is, although participants were expected to feel arousal and likely the same level of positivity in either scenario, only the experimental condition was expected to elicit sexual arousal from participants, and thus activation of mating motives.

Manipulation Check. Participants then completed a 5-item manipulation check indicating (a) their current level of romantic arousal, (b) their current level of sexual arousal, (c) their current desire to be in a relationship, (d) their current desire to have others desire them, and (e) their current positive-negative affect to ensure that the primes had the intended effects (see Appendix D). These questions were anchored on 7-point scales (1=*Not at All*; 7=*Very Much*) on Likert-type scales with larger numbers indicating

greater arousal, but with the affect question indicating greater positive affect between -3 (*Very Negative*) and 3 (*Very Positive*).

Self-Efficacy. Participants were asked to answer questions for a survey measuring their self-efficacy in areas relating to dominance, status, and attractiveness. These questions were based on Bandura's guide for constructing self-efficacy measurement scales (Bandura, 2006; see Appendix E). Importantly, these items tap self-efficacy at the level of temporal activation by asking an individual how efficacious they feel in a specific domain "at this very moment." This scale assessed three domains of self-efficacy: Dominance Self-efficacy (e.g., "Outperform others athletically"), Status Self-efficacy (e.g., "Ensure those I work and interact with have a high level of respect for me"), and Attractiveness Self-efficacy (e.g., "Appear more physically attractive than same-sex peers"). Responses were on 100-point scales (0=*Cannot do at all*; 100=*Highly certain can do*) in 10 unit increments with higher scores indicating greater self-efficacy in the domain in question.

Intrasexual Competitiveness. Participants then completed a survey of questions measuring their level of intrasexual competitiveness (Buunk & Fisher, 2009; see Appendix F). This scale contained 12-items (e.g., "I want to be just a little better than other women [men]."), and responses were on a 7-point scale (1=*Not at all applicable*; 7=*Completely applicable*).

Finally, participants were asked to provide demographics information (Appendix G) before being debriefed (Appendix H).

Results

Preliminary Data Analyses

Prior to all analyses, we calculated the reliability of our manipulation check questions; the four items assessing arousal were reliable ($\alpha=.95$); as such, we created a composite arousal score for each participant in which higher values are indicative of greater arousal. There was a single item assessing affect, where higher values are indicative of more positive affect. Additionally, the domain-specific self-efficacy scales were reliable: Dominance ($\alpha=0.88$), Status ($\alpha=0.87$), Attractiveness ($\alpha=0.93$). As such, we created composite scores for each domain where higher values are indicative of greater Dominance, Status, and Attractiveness self-efficacy, respectively. Because the subscales were moderately correlated (r s ranging from 0.57 to 0.74), we treated subscales as independent factors, rather than averaging them into a single metric of mating self-efficacy. Furthermore, the intrasexual competitiveness (IC) scale demonstrated adequate reliability ($\alpha=0.90$); as such, we created a composite IC score for each participant where higher values are indicative of greater intrasexual competitiveness.

Manipulation Check. To determine the extent to which our manipulation was able to activate mating motives in participants, we first analyzed our manipulation check items by submitting our data to a pair of 2 (Prime: Mating vs. Control) \times 2 (Sex: Male vs. Female) factorial ANOVAs for affect and arousal, separately. For affect, there was a significant main effect for Prime such that participants in the mating prime condition ($M=1.81$, $SD=1.28$) felt more positive affect than did those in the control ($M=1.31$, $SD=1.36$), $F(1, 190)=6.69$, $p=0.010$, $\eta_p^2=0.034$. There was no main effect of participant sex for affect, nor was there an interaction between condition and participant sex

($p > 0.500$). For feelings of arousal, there was a main effect of condition such that participants in the mating prime condition ($M=4.88$, $SD=1.64$) felt greater arousal compared to those in the control ($M=2.18$, $SD=1.45$), $F(1, 190)=156.29$, $p < 0.001$, $\eta_p^2=0.447$. Additionally, men ($M=3.80$, $SD=2.00$) reported higher arousal than did women ($M=3.23$, $SD=2.07$), $F(1, 190)=8.69$, $p=0.004$, $\eta_p^2=0.043$. No interaction between participant sex and condition emerged for arousal, $F(1, 190)=1.60$, $p=0.207$, $\eta_p^2=0.008$. Taken together, these results suggest that our manipulation check was able to elicit positive feelings, more specifically feelings pertinent to sexual arousal.

Primary Data Analysis

Relation between Gender, Condition, and Domain-Specific Self-Efficacy. To analyze whether activation of mating motives heightens self-efficacy in mating specific domains, we submitted our data to a 2 (Prime: Mating vs. Control) \times 2 (Sex: Male vs. Female) factorial MANOVA with the dominance (see Figure 1), status (Figure 2), and attractiveness (Figure 3) subscales all serving as dependent variables. There was a main effect of sex for dominance such that men ($M=50.19$, $SD=21.67$) reported higher levels of dominance self-efficacy than did women ($M=37.01$, $SD=19.84$), $F(1, 193)=19.75$, $p < 0.001$, $\eta_p^2=0.093$. There was a marginal main effect of sex for status, such that men ($M=54.51$, $SD=20.06$) reported higher status mating self-efficacy than did women ($M=49.18$, $SD=18.65$), $F(1, 193)=3.63$, $p=0.058$, $\eta_p^2=0.018$. There was also a main effect of sex for attractiveness mating self-efficacy, such that men ($M=55.27$, $SD = 21.68$) reported higher attractiveness self-efficacy than did women ($M=48.83$, $SD=22.40$), $F(1, 193)=4.33$, $p=0.039$, $\eta_p^2=0.022$. Thus men, on average, report greater mating self-efficacy across all domains compared to women.

There was no prime effect for dominance or status ($ps > 0.410$), however there was a significant effect of condition for attractiveness self-efficacy, such that participants in the mating prime ($M=55.28, SD=21.33$) reported greater attractiveness self-efficacy than control prime participants ($M=48.63, SD=22.71$), $F(1, 193)=4.38, p=0.038, \eta_p^2=0.022$.

There was a significant Participant Sex \times Condition interaction for status self-efficacy, $F(1, 193)=4.29, p=0.044, \eta_p^2=0.022$, and a marginally significant participant sex by condition interaction for attractiveness self-efficacy, $F(1, 197)=3.62, p=0.058, \eta_p^2=0.018$. There was no interaction between participant sex and condition for dominance self-efficacy, $F(1, 193)=0.99, p=0.320, \eta_p^2=0.005$.

To better understand the interactions between participant sex and condition for status and attractiveness self-efficacy, we decomposed these interactions by running separate independent samples t -tests for men and women, comparing their efficacy across the mating and control prime conditions. For status and attractiveness self-efficacy, men in the control and mating primes did not differ ($ps > 0.369$); thus, men's status and attractiveness self-efficacy were not influenced by the short-term mating prime. For women, the mating prime led to greater status self-efficacy ($M=52.97, SD=19.06$) than the control prime ($M=45.38, SD=17.61$), $t(102)=2.11, p=0.037, d=0.42$. For attractiveness efficacy, women in the mating condition ($M=55.02, SD=20.53$) reported higher levels of efficacy compared to women in the control ($M=42.63, SD=22.65$), $t(102)=2.92, p=0.004, d=0.58$. Thus, the short-term mating prime led women to report higher status and attractiveness self-efficacy compared to the control prime.

Moderation by Intrasexual Competitiveness. To determine whether participants' intrasexual competitiveness moderated the findings reported above, we conducted a 2

(Prime: Mating vs. Control) \times 2 (Sex: Male vs. Female) factorial MANCOVA with the dominance, status, and attractiveness subscales all serving as dependent variables, and intrasexual competitiveness as a covariate. This allowed us to determine if intrasexual competitiveness interacted with participant sex and condition in predicting mating self-efficacy. There was a main effect of intrasexual competitiveness for dominance, $F(1, 188)=8.06$, $p=0.005$, $\eta_p^2=0.041$, and attractiveness self-efficacy, $F(1, 188)=5.82$, $p=0.017$, $\eta_p^2=0.030$, indicating not surprisingly that those with higher dispositional intrasexual competitiveness report greater self-efficacy with respect to dominance and attractiveness. However, intrasexual competitiveness did not interact with any other variables in the model, suggesting that it did not moderate the findings (all $ps>0.210$).

Moderation by Relationship Status. To determine whether participants' own relationship status moderated the findings reported above, we conducted a 2 (Prime: Mating vs. Control) \times 2 (Sex: Male vs. Female) \times 2 (Relationship Status: Single, Relationship) MANOVA with the dominance, status, and attractiveness subscales all serving as dependent variables. This allowed us to determine if relationship status interacted with participant sex and condition in predicting mating self-efficacy. There was a main effect of relationship status for dominance, $F(1, 189)=13.32$, $p<0.001$, $\eta_p^2=0.066$, status, $F(1, 189)=7.49$, $p=0.007$, $\eta_p^2=0.038$, and attractiveness self-efficacy, $F(1, 189)=8.78$, $p=0.003$, $\eta_p^2=0.044$, indicating not surprisingly that participants in a relationship reported greater self-efficacy with respect to dominance ($M_{\text{Single}}=37.97$, $SD_{\text{Single}}=21.97$ versus $M_{\text{Relationship}}=46.48$, $SD_{\text{Relationship}}=20.97$), status ($M_{\text{Single}}=47.58$, $SD_{\text{Single}}=21.66$ versus $M_{\text{Relationship}}=54.23$, $SD_{\text{Relationship}}=17.61$), and attractiveness self-efficacy ($M_{\text{Single}}=46.90$, $SD_{\text{Single}}=23.89$ versus $M_{\text{Relationship}}=54.92$, $SD_{\text{Relationship}}=20.69$).

However, relationship status did not interact with any other variables in the model, suggesting that it did not moderate the findings (all $ps > 0.220$).

General Discussion

Men and women differ in their reproductive biology and therefore pursue mating differently. Because men invest less in reproduction than women, they tend to emphasize multiple attractive partners to increase the absolute number of offspring procured. Women, for whom reproduction is more expensive, prefer male partners with greater investment potential and resources, as well as good genes, which are reflected in greater physical attractiveness (Buss, 1989; Trivers, 1972). To facilitate their reproductive goals, men and women have evolved to attempt to outcompete same-sex conspecifics on dimensions that would be preferred by the opposite sex, to attain high-quality mating partners. That is, men try to outcompete other men through dominance and status attainment, which would communicate to high-quality females their capability to secure resources to invest in her and her offspring. Men would also benefit by attempting to be more physically attractive than other men to demonstrate heritable fitness. Women, on the other hand, would be expected to enhance in domains of physical attractiveness as this would be desirable to high-quality male suitors. Indeed, much research supports these enhancement effects, particularly when short-term mating is salient (e.g., Ainsworth & Maner, 2012; Cantú et al., 2013; Durante et al., 2008; Roney, 2003).

In the current research, we tested the hypothesis that these enhancement effects, when short-term mating is salient, are driven by increases in domain-specific mating self-efficacy. Self-efficacy is associated with task persistence, motivation and frustration tolerance which would facilitate goal attainment across domains (e.g., Feltz et al., 2008; Hepler, 2016). Thus, activation of short-term mating goals should heighten domain-specific self-efficacy to facilitate behaviors that would ultimately lead to goal attainment

for successfully outcompeting intrasexual rivals for high-quality mating partners. As such, we hypothesized that men primed with a short-term mating motive would report greater mating self-efficacy in domains related to being more dominant than other males and being capable of attaining greater status than other males; priming women with short-term mating was not expected to influence their self-efficacy in domains related to dominance and status (Hypothesis 1). Additionally, both men and women primed with mating were expected to report greater self-efficacy in the context of being more physically attractive than same-sex peers; however this effect was expected to be larger for women (Hypothesis 2). Finally, it was hypothesized that the short-term mating effects outlined in Hypotheses 1 and 2 should be larger for men and women who self-report being higher in intrasexual competitiveness (IC; Hypothesis 3).

Hypothesis 1: We found no evidence that the short-term mating prime led men to report higher dominance and status mating self-efficacy than men in the control prime. Thus, Hypothesis 1 was not supported. However, independent of priming condition, men did report higher dominance and status mating self-efficacy than women. This is consistent with research indicating that attaining greater status and dominance over other men facilitates men's mating opportunities (e.g., Frederick & Haselton, 2007; Griskevicius et al., 2007, 2009; Sundie et al., 2011), and that dispositional self-efficacy in these domains may be adaptive to ensure a baseline level of confidence that would be requisite for pursuing a mate. Surprisingly, women primed with mating reported greater status self-efficacy than did women in the control condition. While we hypothesized that this should be true for male participants, the null effect for males may simply be because they have relatively high levels of status self-efficacy regardless of being primed with

mating. Conversely, women's increased status self-efficacy when primed with mating may be a contemporary, rather than evolutionary, finding. In Western societies, such as that utilized in the current study, women are highly capable of engaging in behaviors, such as pursuing careers, that would allow them to be self-sufficient in procuring resources to invest in their own offspring. Future research should determine whether high-quality males finding female status attractive when selecting a mate to determine if the finding in the current study is an adaptive mating strategy for women.

Hypothesis 2: We found partial support for Hypothesis 2. Specifically, the mating prime led women primed with short-term mating to report greater attractiveness self-efficacy than women in the control condition. Although we expected this effect to be larger for women, given the greater value men place on female youth and beauty when selecting a mate (Buss, 1989), we also expected the short-term mating prime to lead men to report greater attractiveness self-efficacy than men in the control condition, given that women value physical attractiveness in men as a cue to good genes (e.g., Frederick & Haselton, 2007; Kenrick et al., 1993). Since mating is a far more competitive endeavor for men than women, it may be that men have a consistently elevated sense of physical attractiveness self-efficacy, regardless of the acute salience of mating, particularly in a short-term context.

Hypothesis 3: Hypothesis 3 was partially supported. Although intrasexual competitiveness did not moderate the relationship between mating prime, participant gender, and domain-specific mating self-efficacy, higher intrasexual competitiveness, in general, was associated with greater self-reported domain specific mating self-efficacy. Specifically, men and women higher in intrasexual competitiveness reported greater

attractiveness and dominance mating self-efficacy. Given that those higher in intrasexual competitiveness are dispositionally more concerned with outcompeting same-sex conspecifics for high quality mating opportunities (Buunk & Massar, 2012), their greater dominance and attractiveness mating self-efficacy may facilitate behaviors that help them achieve these goals.

Limitations

The major limitation to this study was the use of online data collection. The use of online survey tools inherently poses limitations to data collection. Specifically, the lack of an in-room experiment removes the opportunity for participants to ask questions and gain clarification if confusion occurs, which could ultimately preclude the actual construct from being tapped. Additionally, there is greater risk that participants who are not qualified for the study will participate under false pretenses, or that they will feel comfortable answering dishonestly or randomly. To minimize any damage caused by these disadvantages, the data was pre-processed prior to analysis and participants who did not qualify (e.g., not indicating heterosexual attraction) or who did not answer all the questions were removed. Nonetheless, online data collection has demonstrated to ultimately be a reliable source (Buhrmester, et al., 2011; Holden, Dennie, & Hicks, 2013), which justified our use.

Future Directions

Future research should look at how enhanced mating self-efficacy in women affects their consumer behavior. Women emphasize and upregulate their consumption of attractiveness-enhancing beauty during resource scarcity, as such a strategy provides motivation to attract higher-quality partners to ensure access to resources (Hill,

Griskevicius, Rodeheffer, Durante, & White, 2012; Sacco, Bermond, & Young, 2016). It may follow that women's consumer behavior experiences similar shifts when mating self-efficacy is inflated. Being more efficacious could include augmented confidence in one's ability to make oneself more attractive with beauty products or provocative clothing. Thus, one may be motivated to acquire the resources necessary to enact their domain-specific mating strategy.

Future research should also consider the role of sociosexual orientation, an individual difference in adopting strategic pluralism in mate acquisition (Gangestad & Simpson, 1993). Perhaps individuals with a more unrestricted sociosexual orientation may experience greater efficacy on a chronic level. Indeed, sociosexually unrestricted individuals already have heightened sensitivity to cues indicating fitness and short-term mating intentions that would facilitate attainment of their goals (e.g., Brown & Sacco, 2017; Sacco, Hugenberg, Sefcek, 2009), that their identification of mating opportunities may be part of a larger psychological repertoire to ensure their attainment of their most salient mating goals. That is, unrestricted individuals' sensitivity would motivate them to attract those whom they perceive as higher quality. Future research should consider sociosexuality as a moderating variable in self-efficacy in these domains.

Along with self-reported feelings of efficacy in the domains presented in this study, future research should also concern behavioral manifestations of heightened efficacy. Perhaps this heightened efficacy seen in this study would be able to facilitate behavioral attraction necessary for mating to occur (Montoya & Insko, 2008). Previous research indicated that behavioral attraction is less apparent among individuals who perceive themselves as less able to attract their prospective mate themselves (e.g.,

Greitemeyer, 2010). Instilling self-efficacy in domain-specific capacities may elicit behaviors that would facilitate mating just as other domain-specific forms of self-efficacy produce consonant heightened performance (e.g., Hepler, 2016). This could manifest through participants attaining closer proximity to an interaction partner (e.g., Kawakami, Phillips, Steele, & Dovidio, 2007), or, more germane to our measures, engaging in the specific efficacy behaviors. For example, men may flex muscles and improve their posture in such conditions whereas women may flirt more (e.g., Cantú et al., 2013; Roney et al., 2003). Importantly, future research should attempt to demonstrate that mating self-efficacy serves as a mediator between activation of mating motives and actual attraction behavior.

Conclusion

Past research indicates that mating motivation alters behavior to improve mating success, and that increased mating self-efficacy would be an effective behavioral change that would improve reproductive success. The present research shows that activated mating motivation increases mating self-efficacy in women, specifically in domains that prove advantageous for acquisition of high quality partners. Additionally, there is evidence that men have adaptively employed a continual state of high mating self-efficacy for optimized mating performance.

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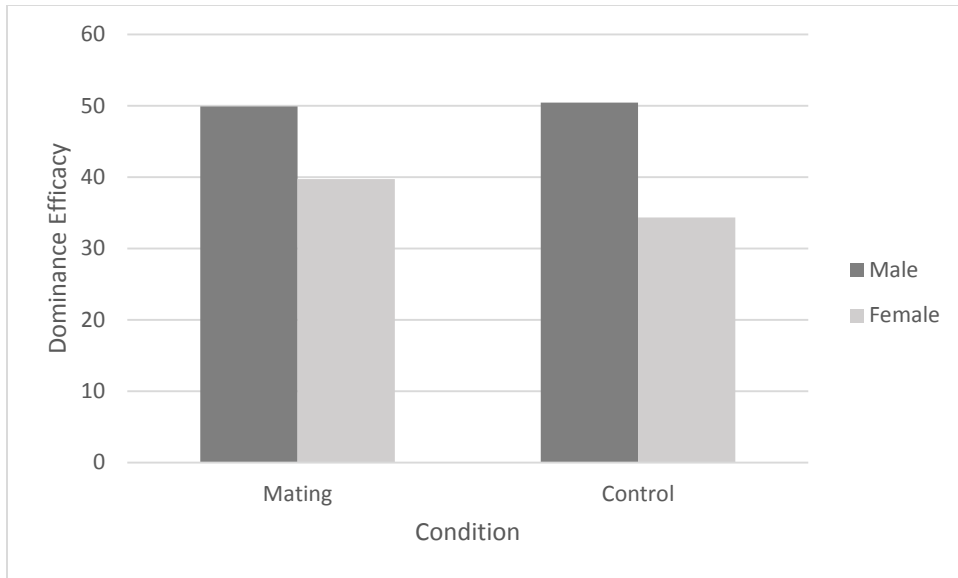


Figure 1. Dominance-Related self-efficacy as a function of participant sex and condition.

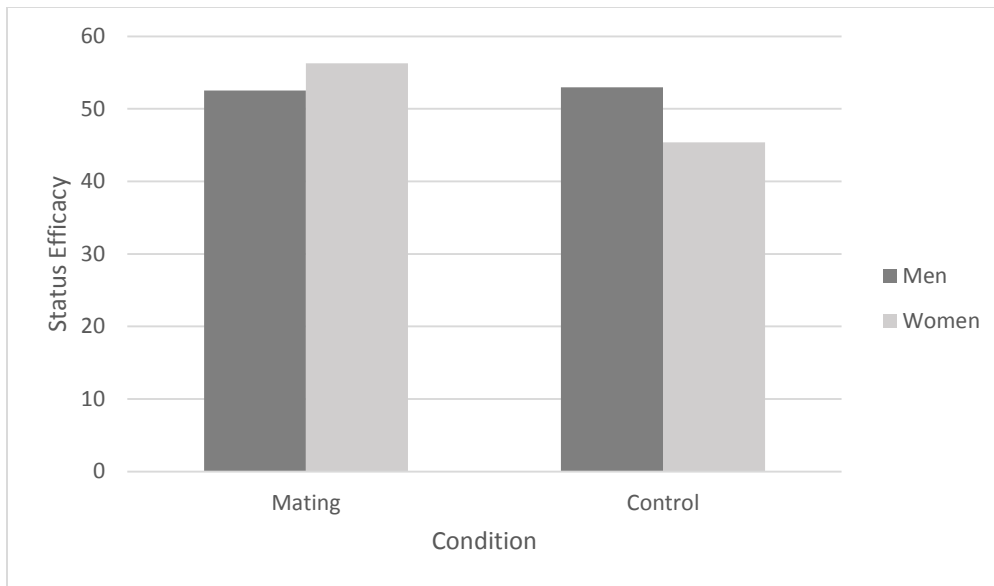


Figure 2. Status-Related self-efficacy as a function of participant sex and condition.

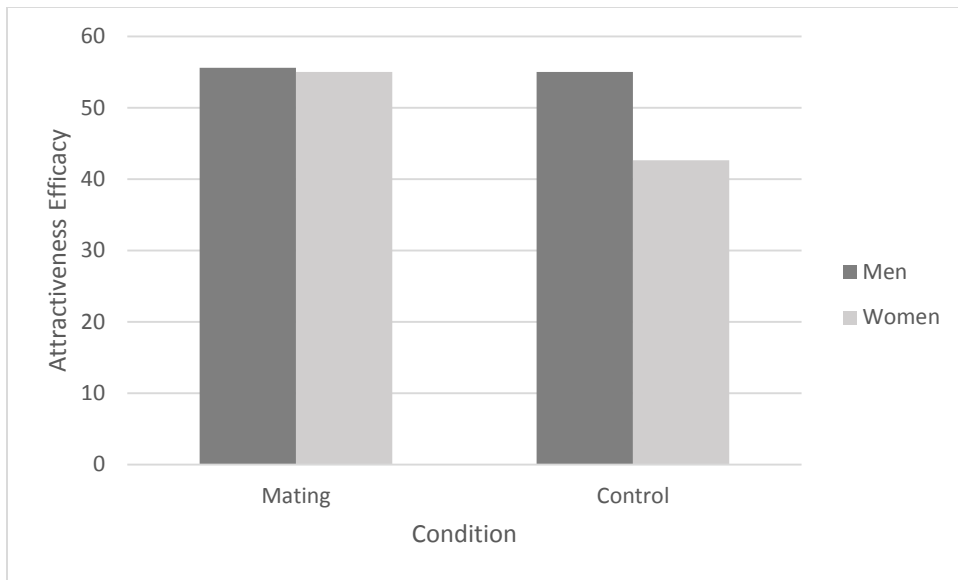


Figure 3. Attractiveness-Related self-efficacy as a function of participant sex and condition.

Appendix A: Informed Consent



INSTITUTIONAL REVIEW BOARD
LONG FORM CONSENT

LONG FORM CONSENT PROCEDURES
<p>This completed document must be signed by each consenting research participant.</p> <ul style="list-style-type: none"> The Project Information and Research Description sections of this form should be completed by the Principal Investigator before submitting this form for IRB approval. Signed copies of the long form consent should be provided to all participants. <p style="text-align: right;"><small>Last Edited August 28th, 2014</small></p>

Today's date:

PROJECT INFORMATION

Project Title: Vacation		
Principal Investigator: Nate Horton, Donald F. Sacco, PhD	Phone: 601-266-6747	Email: donald.sacco@usm.edu
College: College of Education and Psychology	Department: Psychology	

RESEARCH DESCRIPTION

1. Purpose:

You are invited to take part in a research study conducted by Dr. Donald Sacco in the Department of Psychology. Any questions or concerns regarding this research may be directed to Don Sacco (Owings-McQuagge Hall; Room 220F; 601.266.6747; Donald.Sacco@usm.edu). This project and this consent form have been reviewed by the Institutional Review Board, which ensures that research projects involving human participants follow federal regulations. Any questions or concerns about your rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, Box 5147, Hattiesburg, MS 39406, (601) 266-6820.

2. Description of Study:

In this study, you will read a brief story about an activity. Then, you will answer questions about your own abilities with other people. This will be followed by answering some questions about relationships. Finally, you will indicate some demographics information.

3. Benefits:

Your participation in this study does not guarantee any beneficial results. However, it will aid in your understanding of how psychological research is conducted as well as contribute to the general knowledge in the field. Nonetheless, you will receive compensation for your participation.

4. Risks:

The risks associated with participation in this study are not greater than those ordinarily encountered in daily life, although you may feel mild emotional discomfort in various stages of the experiment. If you feel that you are distressed at any time while participating in this research, you should contact the researcher immediately. Furthermore, for questions regarding topics of a sensitive nature, you can choose to skip those questions and it will not impact your compensation for participating in this study.

5. Confidentiality:

The responses that you provide today will be kept completely confidential. At no time will your name or any other identifying information be associated with any of the data that you generate today. It will never be possible to identify you personally in any report of this research. Within these restrictions, results of the study will be made available to you upon request.

6. Alternative Procedures:

You are free to discontinue your participation in this study at any time without penalty or loss of benefits. You may also freely decline to answer any of the questions asked of you.

7. Participant's Assurance:

This project has been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations.

Any questions or concerns about rights as a research participant should be directed to the Chair of the IRB at 601-266-5997. Participation in this project is completely voluntary, and participants may withdraw from this study at any time without penalty, prejudice, or loss of benefits.

Any questions about the research should be directed to the Principal Investigator using the contact information provided in Project Information Section above.

CONSENT TO PARTICIPATE IN RESEARCH

Participant's Name: _____

Consent is hereby given to participate in this research project. All procedures and/or investigations to be followed and their purpose, including any experimental procedures, were explained to me. Information was given about all benefits, risks, inconveniences, or discomforts that might be expected.

The opportunity to ask questions regarding the research and procedures was given. Participation in the project is completely voluntary, and participants may withdraw at any time without penalty, prejudice, or loss of benefits. All personal information is strictly confidential, and no names will be disclosed. Any new information that develops during the project will be provided if that information may affect the willingness to continue participation in the project.

Questions concerning the research, at any time during or after the project, should be directed to the Principal Investigator with the contact information provided above. This project and this consent form have been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-5997.

Research Participant

Person Explaining the Study

Date

Date

Appendix B-1

Short-Term Mating Prime for Women

Imagine that you are on vacation with your friends on a tropical island. It's the last day of your trip and you are sitting on the beach on a pleasant summer afternoon, sipping an exotic drink. The air is warm and pleasant, and you watch the waves as the sun begins to set. You have a book open, but you're not really reading it. Instead, you look around, relaxed and daydreaming. As you watch the people strolling by on the soft sand, you notice that everyone seems to be in a particularly good mood.

From behind you, you hear a voice say: "Wow, isn't that the most beautiful sunset you have ever seen?"

When you turn around, you are surprised to see that it's coming from a particularly handsome man whom you have seen before. You remember noticing him a few days earlier at the hotel, when your eyes locked across the lobby. Since that time, you've seen him several times, but you have never had a convenient opportunity to talk with him.

Now he is standing right in front of you, and smiling warmly. "Mind if I join you for a few minutes?" he says.

At first you feel a bit awkward, but as you begin to talk, you realize that you feel incredibly comfortable with him. You share your thoughts about your week on the island, and you are both a little sad that your time in paradise hasn't been as exciting as you had hoped. And while you learn that he lives far away from you, it turns out that it's his last night on the island as well. Up close, he is even more attractive and charming than you remember. And he is wonderful to talk to. You find that everything he says is somehow fascinating, and you notice that when you talk, he listens carefully to everything you say.

An hour passes very rapidly and he notices that he's late for dinner with his friends. He suggests that maybe he'll just skip dinner with them and stay here with you, if you still want company. After all, he sees them all the time, but the two of you only have one evening together. You are only too glad to prolong the conversation. It is clear that he is enjoying your company immensely.

He suggests that the two of you go grab something to eat. Walking together, you notice that he's walking close to you and comfortably touching you on the arm when you say something that makes him laugh. When he's around you, your senses become heightened. Even when his hand touches yours by accident, you feel a tingle and a rush of excitement.

You quickly glance at his eyes, waiting for him to look at yours. When he does, both of you smile and look away.

You end up in a little restaurant near the beach, and the two of you sit in a dark romantic corner in the back. By the candlelight, you notice the pleasant and soothing aromas from the kitchen. As the evening goes on, you realize you are having an absolutely wonderful time with this person, and that he is feeling the same way. The two of you order a dessert together and decide to share it. He suggests that after dinner, both of you should go for a walk on the beach in the moonlight. You have been dreaming about someone asking you that very question all week.

As you stroll out onto the sand, he reaches for your hand. You softly squeeze his hand in yours and your eyes meet once again. It's a little windy and you get closer to him. His body feels warm under the stars and you put your head on his bare arm. You can hear that your heart is beating faster, and you feel excited. The sand feels cool and soft against your feet. A wave comes crashing on the beach and you both lightly trip and fall as you try to run away. Sitting in the sand and still holding his hand, you feel the coldness of the water on your feet. Both of your eyes lock again and your heart feels like it's about to stop. As you look at his beautiful face in the moonlight, his hand moves up to caress the back of your neck. You can feel your hairs begin to tingle. He leans in and the tip of his nose slowly touches yours as you continue to wander in each other's gaze. Finally, you close your eyes and his soft lips slowly touch yours for the first time. Although you know that you might never see him again, the kiss is filled with passion. Your embrace is flowing with the kind of desire that you have never felt. You squeeze his body tighter, and you can feel yourself getting excited as you begin to think of how to make this night be one of the most memorable of your entire life.

Appendix B-2

Short-Term Mating Prime for Men

Imagine that you are on vacation with your friends on a tropical island. It's the last day of your trip and you are sitting on the beach on a pleasant summer afternoon, sipping an exotic drink. The air is warm and pleasant, and you watch the waves as the sun begins to set. You have a book open, but you're not really reading it. Instead, you look around, relaxed and daydreaming. As you watch the people strolling by on the soft sand, you notice that everyone seems to be in a particularly good mood.

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She suggests that the two of you go grab something to eat. Walking together, you notice that she's walking close to you and comfortably touching you on the arm when you say something that makes her laugh. When she's around you, your senses become heightened. Even when her hand touches yours by accident, you feel a tingle and a rush

of excitement. You quickly glance at her eyes, waiting for her to look at yours. When she does, both of you smile and look away.

You end up in a little restaurant near the beach, and the two of you sit in a dark romantic corner in the back. By the candlelight, you notice the pleasant and soothing aromas from the kitchen. As the evening goes on, you realize you are having an absolutely wonderful time with this person, and that she is feeling the same way. The two of you order a dessert together and decide to share it. She suggests that after dinner, both of you should go for a walk on the beach in the moonlight. You have been dreaming about someone asking you that very question all week.

As you stroll out onto the sand, she reaches for your hand. You softly squeeze her hand in yours and your eyes meet once again. It's a little windy and she gets closer to you. Her body feels warm under the stars and she puts her head on your bare arm. You can hear that your heart is beating faster, and you feel excited. The sand feels cool and soft against your feet. A wave comes crashing on the beach and you both lightly trip and fall as you try to run away. Sitting in the sand and still holding her hand, you feel the coldness of the water on your feet. Both of your eyes lock again and your heart feels like it's about to stop. As you look at her beautiful face in the moonlight, her hand moves up to caress the back of your neck. You can feel your hairs begin to tingle. You lean in and the tip of your nose slowly touches hers as you continue to wander in each other's gaze. Finally, you close your eyes and her soft lips slowly touch yours for the first time. Although you know that you might never see her again, the kiss is filled with passion. Your embrace is flowing with the kind of desire that you have never felt. You squeeze her body tighter, and you can feel yourself getting excited as you begin to think of how to make this night be one of the most memorable of your entire life.

Appendix C

Control Prime

Imagine that it's Friday afternoon during the semester. You've been working hard all week and you've been looking forward to this weekend for quite a while. You and one of your friends have two tickets for a sold-out concert that's happening tonight. Both of you have been looking forward to this show for a long time. In fact, you had to bend over backwards to get the tickets. Your friend has been talking about the concert every day for weeks now, so you know she's excited. And although it's still several hours away, you can already feel your heart beating a little faster than normal.

As you're getting ready for the show at home, your friend calls to tell you that she's coming over in about an hour. Just so you don't forget later, you decide to get the tickets from your drawer. You open your top drawer where you remember leaving them, but they're not there. You search a little deeper in the drawer, but they're not there either.

You stop to take a breath and tell yourself to calm down. You know you put the tickets in a good place, but where? You start searching through your backpack. Books, folders, pens, but no tickets. You turn the bag upside down and shake it. Nothing but junk. Now you start getting worried. What if you lost the tickets? What's your friend going to think?

In a hurry, you look through the laundry. Maybe they're in a pocket somewhere? You find some pieces of paper, but no tickets. You go into your closet and start throwing things to the floor—no tickets. You're feeling upset at this point. Your hands start to shake a little. You think back to when you had the tickets and try to retrace your steps. You clearly remember putting them in your top drawer, so you search again. You inspect everything, but there are no tickets in this drawer. You look through your whole room, but they're nowhere to be found.

You run to the kitchen and start looking on the counters. You open all the cupboards and drawers. You have no idea why the tickets would be there, but you need to look somewhere. In fifteen minutes, your kitchen looks like a disaster area. But still no tickets! You run out into the driveway. Maybe the tickets fell out somewhere? You look in the grass, the bushes, underneath cars. But even if they did fall out, they probably wouldn't even be there by now. As you walk back inside in complete frustration, you feel as though you're ready to pull your hair out. You lost the tickets. And you obviously can't go to the show without them.

Suddenly, you hear a knock on the door. Your friend is early, probably because she's eager to get going. You can hear her humming outside. What are you going to tell her?

She'll be crushed. Is there anything you can do? Maybe you should lie? But that probably won't solve anything. As you walk toward the door, you get ready to fess up, take the blame, and hope that everything will be okay. You open the door, ready for the worst.

As you are about to start telling her what happened, she yells "Are you ready?" and pulls out the two tickets from her back pocket. Your eyes get wide. You grab the tickets from her hand and fall to your knees. Your friend has the tickets! She's had them the whole time. You think back and remember that she wanted to show the tickets to another person, so she took them the other week. You can't believe you forgot. You don't think you've ever felt so relieved in your life. You sit down, shake your head, and put your hand on your chest. You begin to laugh, wiping the sweat from your forehead. You and your friend will get to go to the show after all. Things are going to be just fine.

As you try to forget what happened, you're actually even more thrilled about the concert than before. Your relief turns into elation. You want to shout to everyone just how great you feel. It's as though you just found the winning lottery ticket. You can appreciate going to the concert even more now, knowing that you were very close to not going at all. Your friend is dying to get to the show, and her euphoria is contagious. Both of you run out the door, turn up the stereo, and head off to the most thrilling show of your lives.

Appendix D
Manipulation Check

Please respond to the following questions using the scales provided below.

1. At this very moment, how sexually aroused do you feel?

Not at							Very
All							Much
1	2	3	4	5	6		7

2. At this very moment, how romantically aroused do you feel?

Not at							Very
All							Much
1	2	3	4	5	6		7

3. At this very moment, how much do you desire to be in a relationship?

Not at							Very
All							Much
1	2	3	4	5	6		7

4. At this very moment, how much would you like others to be attracted to you?

Not at							Very
All							Much
1	2	3	4	5	6		7

5. At this very moment, how negative/positive do you feel?

Very			Neither			Very
Negative			Positive nor			Positive
			Negative			
-3	-2	-1	0	1	2	3

Appendix E **Self-Efficacy Scale**

Please rate how certain you are that you can do each of the things described below at this very moment; do so by writing the appropriate number. Your answers will be kept strictly confidential and will not be identified by name.

Rate your degree of confidence by recording a number from 0 to 100 using the scale given below:

0 10 20 30 40 50 60 70 80 90 100

Cannot do at all

Moderately can do
can do

Highly certain

Physical Dominance

1. Impress others with my athletic skills.
2. Work out regularly and become stronger or more fit.
3. Be good at sports that are somewhat dangerous.
4. Intimidating a same-sex peer by staring at them.
5. Outperform others athletically.
6. Win a physical confrontation with a same-sex peer.
7. Use a threatening posture to deter a same-sex competitor.

Status

1. Impress someone with how much money I have.
2. Effectively lead an employee team at work.
3. Advance my position in a work environment
4. Ensure those I work and interact with have a high level of respect for me.
5. Convince someone who disagrees with me to change their mind.
6. Attain a career in which I will earn more than those around me.
7. Spend more money than most other people can on a date.

Attractiveness

1. Get an attractive member of the opposite sex to be more interested in me than someone else.
2. Appear more physically fit than same-sex peers.
3. Appear more physically attractive than same-sex peers.
4. Dress in a manner that would make more attractive than same-sex peers.
5. Smell sexier to an attractive member of the opposite sex compared to my same-sex peers.

6. Be better than my same-sex peers at flirting with an attractive member of the opposite sex.
7. Carry myself in a manner (i.e., stand up straight, walk sexy) that would make me more attractive to an attractive member of the opposite sex compared to same-sex peers.

Appendix F Intrasexual Competition Scale

Response scale for all items:

Not at All							Completely
Applicable							Applicable
1	2	3	4	5	6	7	

[Version for men]

Please indicate how much the following statements apply to you. Circle the number that corresponds to the answer of your choice.

1. I can't stand it when I meet another man who is more attractive than I am.
2. When I go out, I can't stand it when women pay more attention to a friend of mine than to me.
3. I tend to look for negative characteristics in attractive men.
4. When I'm at a party, I enjoy it when women pay more attention to me than to other men.
5. I wouldn't hire a very attractive man as a colleague.
6. I just don't like very ambitious men.
7. I tend to look for negative characteristics in men who are very successful.
8. I wouldn't hire a highly competent man as a colleague.
9. I like to be funnier and more quick-witted than other men.
10. I want to be just a little better than other men.
11. I always want to beat other men.
12. I don't like seeing other men with a nicer house or a nicer car than mine.

[Version for women]

Please indicate how much the following statements apply to you. Circle the number that corresponds to the answer of your choice.

1. I can't stand it when I meet another woman who is more attractive than I am.
2. When I go out, I can't stand it when men pay more attention to a friend of mine than to me.
3. I tend to look for negative characteristics in attractive women.
4. When I'm at a party, I enjoy it when men pay more attention to me than to other women.
5. I wouldn't hire a very attractive woman as a colleague.
6. I just don't like very ambitious women.
7. I tend to look for negative characteristics in women who are very successful.
8. I wouldn't hire a highly competent woman as a colleague.
9. I like to be funnier and more quick-witted than other women.
10. I want to be just a little better than other women.
11. I always want to beat other women.
12. I don't like seeing other women with a nicer house or a nicer car than mine.

Appendix G Demographics

Please indicate your sex for us one more time.

- Male
 Female

What is your age (in years)?

What is your ethnicity?

- African-American/Black
 Asian/Asian-American
 Caucasian/White
 Hispanic or Latino
 Other

What is your sexual orientation? Please keep in mind that your name will never be associated with this information.

- Bisexual
 Heterosexual
 Homosexual
 Other

What is your relationship status?

- Single
 In a relationship or married

Appendix H Debriefing Form

Thank you for participating in this experiment! We hope you found the task interesting and experience enjoyable. **We recommend you print a copy of this form for your records.**

In this study, we were interested in how different forms of motivation influence people to perceive themselves as having the ability to engage with people of the opposite sex. Specifically, we were interested to determine if making people interested in mating would temporarily make them feel more effective at trying to attract a mate. Previous research has shown that making men think about mating will produce greater willingness to be physically aggressive against other men (Griskevicius et. al, 2009). Women are also flirtier and try to appear more attractive when their mating goals are activated, particularly when they are ovulating (Cantú, Simpson, Griskevicius, Weisberg, Durante, & Beal; Durante, Haselton, & Li, 2008).

One's perception of their own ability to perform a task is known as their self-efficacy for that task. When someone has high self-efficacy for a specific task, they are generally more successful at accomplishing that task (as compared to someone with a low self-efficacy; Multon, Brown, & Lent, 1991). Since high self-efficacy is a known to be beneficial, we were curious to see if this relationship was strategically taken advantage of by evolution, in order to make people more effective at acquiring mates. If it were so, someone who was attempting to win a mate would temporarily have higher self-efficacy in the specific areas that their potential mate would find attractive; this is the change we were looking for.

Due to the on-going nature of this research, we would like to ask for your cooperation in not revealing any details of this study to others (e.g. friends, classmates) who might eventually participate in this study. These details could affect the way they perform in this experiment, which would adversely affect the nature of our study. If someone does ask, you can just tell them that you were asked to participate in a study about social perception, rather than providing specific details about the study.

If you have further questions, please contact the experimenter listed on your consent form (Don Sacco, Donald.Sacco@usm.edu).

Should you be interested in reading research related to this work, you can get more information from:

Ainsworth, S. E., & Maner, J. K. (2012). Sex begets violence: Mating motives, social dominance, and physical aggression in men. *Journal of Personality and Social Psychology, 103*, 819-829.

Hutchinson, J. C., Sherman, T., Martinovic, N., & Tenenbaum, G. (2008). The effect of manipulated self-efficacy on perceived and sustained effort. *Journal of Applied Sport Psychology, 20*, 457- 457-472.

Appendix I IRB Approval Letter

**INSTITUTIONAL REVIEW BOARD**

118 College Drive #5147 | Hattiesburg, MS 39406-0001

Phone: 601.266.5997 | Fax: 601.266.4377 | www.usm.edu/research/institutional.review.board**NOTICE OF COMMITTEE ACTION**

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.
Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 16102611

PROJECT TITLE: Mating and Self-Efficacy

PROJECT TYPE: New Project

RESEARCHER(S): Nate Horton

COLLEGE/DIVISION: College of Education and Psychology

DEPARTMENT: Psychology

FUNDING AGENCY/SPONSOR: N/A

IRB COMMITTEE ACTION: Expedited Review Approval

PERIOD OF APPROVAL: 10/28/2016 to 10/27/2017

Lawrence A. Hosman, Ph.D.**Institutional Review Board**