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Abstract: According to Roney (2003), when exposed to potential mates (young women), men show greater conformity to female mate preferences. This study conceptually replicates and extends this finding to show that women also respond to female physical attractiveness. When exposed to attractive women (potential rivals), women report higher levels of communion and lower levels of agency.

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The impact of visual exposure to a physically attractive other on self-presentation

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The impact of visual exposure to a physically attractive other on self-presentation

1. Introduction

In the past decade, an increasing amount of research has built on evolutionary psychology to examine consumption phenomena (Griskevicius & Kenrick, 2013). The idea that the human mind has been gradually shaped by tens of thousands of years of survival and reproductive pressures has provided ultimate explanations of human behavior. For example, the reason men and women seek different characteristics in potential mates is that they invest different types of resources in their offspring (Trivers, 1972). Whereas women invest physiological resources through gestation or lactation, men invest more indirect material resources, such as shelter and protection. Therefore, women have evolved to seek mate qualities related to resource possession (e.g., wealth, social status, ambition), while men have evolved to seek mate qualities that reflect fertility and health (e.g., youth, physical attractiveness) (Buss, 1989).

Building on this approach and the social cognition literature, Roney (2003) describes a pioneer model of mate attraction in which input cues from potential mates can automatically prime a psychological orientation directed to mate attraction. In turn, this psychological orientation encourages the behavioral expression of courtship tactics. Roney also provides preliminary evidence for his model by showing that the mere visual perception of young women considered highly attractive—potential mates for men—is capable of activating self-conceptions that comply with female mate preferences. Concretely, men exposed to magazine advertisements containing photos of young women reported more favorable attitudes toward material wealth, greater momentary feelings of ambition and aggressiveness, and higher ratings of extraversion than men exposed to magazine advertisements containing photos of older women.

These findings have led to noteworthy developments in marketing literature. They paved the way for further research on how the *explicit* activation of mating goals influences consumer behavior (Griskevicius et al., 2009; Monga & Gürhan-Canli, 2012). For example, imagining a desirable romantic encounter (an explicit mate attraction goal induction) or imagining that a rival was flirting with their partner (an explicit mate retention goal induction) respectively increased men's and women's willingness to spend on luxury products (Griskevicius et al., 2007; Wang & Griskevicius, 2014).

The current research conceptually replicates Roney's (2003) findings in a neutral data collection setting, in which only the picture of the researcher supposedly in charge of the study varies (an *implicit* goal induction). By using a direct manipulation of physical attractiveness, the study clearly demonstrates the influence of female physical attractiveness on men's self-conceptions. This research also extends Roney's findings, by showing that women respond to the physical attractiveness of other women: when exposed to an attractive female researcher (a potential rival), they over-report traits that men expect in a mate. This finding not only provides support for the evolutionary underpinnings of Roney's model but also complements the literature on female intra-sexual rivalry (Janssens et al., 2011; Wang & Griskevicius, 2014), by suggesting that *implicit* input cues from potential rivals are capable of priming mating goals that influence the respondent's intention to signal her mating value.

2. Hypotheses

Traits that women prefer in a mate are tied to the pursuit of *agency*, a mode of relating to the world by striving for mastery and power. In contrast, traits that men prefer in a mate are tied to the pursuit of *communion*, a mode of relating to the world through social relationships, interpersonal affiliation, and harmony with others (Bakan, 1966). In line with Roney (2003), we

therefore expect that men exposed to an attractive (vs. unattractive) woman will report more favorable attitudes toward agentic goals and less favorable attitudes toward communal goals.

In addition, because an attractive woman is a potential mate for men, she is a potential rival for women. As such, she primes an intra-sexual competition context in women (Durante et al., 2011), which activates mating goals. Female respondents should therefore report more favorable attitudes toward communal goals and less favorable attitudes toward agentic goals when exposed to an attractive (vs. unattractive) female researcher. Finally, because physical attractiveness is not informative of resources possession (what women expect in a mate), an attractive man is neither a potential mate for women nor a potential rival for men. Both sexes should therefore be insensitive to male physical attractiveness.

3. Procedure

We conducted an online survey, whose fictional female researcher varied in both sex and physical attractiveness. In line with Roney's (2003) study, we did not make any explicit mention of a dating context. In contrast, rather than manipulating the model's youth and later measuring her attractiveness, we kept the age of the researcher constant and used a direct manipulation of physical attractiveness (see the appendix for more details on the procedure). In total, 265 respondents recruited through an online panel (62% female, mean age: 31 years) participated in the study, which appeared as a typical personality test.

To measure agentic and communal goals, we used a short version of Paulhus's (1991) Balanced Inventory of Desirable Responding. Though initially built to capture unconscious and conscious social desirability, research has shown that its two sub-scales measure social desirability in agency- and communion-related contexts, respectively (Steenkamp, de Jong, & Baumgartner, 2010).

4. Results

The analysis of variance revealed significant three-way interactions between the respondent's sex, the researcher's sex, and the researcher's physical attractiveness on agentic goals ($F(1, 257) = 5.928, p = .016$) and communal goals ($F(1, 257) = 4.288, p = .039$). As expected, when exposed to a physically attractive (vs. unattractive) female researcher, men scored significantly higher on agentic goals (5.190 vs. 4.525; $F(1, 53) = 3.779, p = .028$) and lower on communal goals (3.480 vs. 4.000; $F(1, 53) = 3.603, p = .031$) but were insensitive to the physical attractiveness of the male researcher (agentic goals: 4.659 vs. 4.978; $F(1, 43) = .795, p = .188$; communal goals: 3.580 vs. 3.228; $F(1, 43) = 1.136, p = .146$). Conversely, when exposed to a physically attractive (vs. unattractive) female researcher, women scored significantly lower on agentic goals (3.813 vs. 4.364; $F(1, 69) = 5.518, p = .011$) and higher on communal goals (4.364 vs. 3.813; $F(1, 69) = 2.934, p = .045$) but were insensitive to the physical attractiveness of the male researcher (agentic goals: 4.284 vs. 4.396; $F(1, 92) = .141, p = .354$; communal goals: 4.017 vs. 3.944; $F(1, 92) = .060, p = .403$). Table 1 summarizes these results and compares the current study's procedure and findings with Roney's (2003).

5. Discussion

In line with Roney (2003), this research suggests that the mere visual perception of a potential mate (a physically attractive woman) can prime a psychological orientation in men toward mate attraction. When exposed to an attractive female researcher, men reported traits consistent with what women seek in a romantic partner: higher levels of agency and lower levels of communion.

This research also complements Roney's (2003) work in two ways. First, it shows that women also respond to the physical attractiveness of other women. When exposed to an

attractive female researcher, they reported higher levels of communion and lower levels of agency. Because an attractive woman is a potential mate for men, she is a potential rival for women. As such, she activates an intra-sexual competition context in women, which encourages them to behave in ways that ensure the continued existence of their romantic relationship. Second, the results of the current study are consistent with the idea that because physical attractiveness is not informative of resource possession (i.e., what women expect in a mate), an attractive man neither activates mating goals nor induces changes in self-conceptions.,

Finally, because it did not explicitly ask participants to think of a mating context, the current study extends recent literature on female intra-sexual competition and consumer behavior (Durante et al., 2011; Janssens et al., 2011; Wang & Griskevicius, 2014), by showing that *implicit* input cues from potential rivals are capable of priming an intra-sexual competition context that influences the respondent's self-conceptions. This finding has important practical implications for the conduct of marketing research because it implies that when data collection involves a female experimenter, a "sexual desirability" response bias might threaten the internal validity of the results.

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Table 1

Replication and extension of the effects of visual exposure to the opposite sex.

Study	Respondents	Stimuli	Conditions	Dependent Variables	Results
Roney (2003) Exp. 2	Male students (N=22)	Photographs in magazine advertisements	2 (20-year-old female model vs. 50-year-old female model)	Attitude toward material wealth	More favorable attitude in the younger than older models condition
				Feelings of ambition	Stronger feelings in the younger than older models condition
				Feelings of aggressiveness	
				Free response listing of personality traits	More traits consistent with extraversion in the younger than older models condition
This study	Men and women from general population (N=265)	Photographs of (fictional) researchers on the home page of an online study and on the header of following web pages	2 (male vs. female respondents) × 2 (male vs. female researcher) × 2 (attractive vs. unattractive researcher)	Attitude toward agentic goals	Men: more favorable attitude in the attractive female than unattractive female researcher condition
					Women: less favorable attitude in the female attractive than female unattractive researcher condition
					No difference between the attractive and unattractive male researcher condition
			Attitude toward communal goals		Men: less favorable attitude in the attractive female than unattractive female researcher condition
					Women: more favorable attitude in the attractive female than unattractive female researcher condition
					No difference between the attractive and unattractive male researcher condition

Appendix

To manipulate physical attractiveness, we provided photographs of either a physically attractive researcher or a physically unattractive researcher on the home page of the survey, as well as on the header of its following pages. Which photograph the respondent saw was determined randomly.

We conducted pre-tests with a convenience sample of 59 people to select four (of 12) black-and-white portrait photographs taken from the Internet. All photographs showed face-on portraits with similar framing. The pre-test confirmed that the four selected portraits differed highly and significantly in terms of the models' physical attractiveness: the attractive male (female) model achieved a much higher mean score than the unattractive male (female) model on Joseph's (1982) attractiveness scale ($M_{male} = 2.7$ vs. 5.0 , $p < .001$; $M_{female} = 2.4$ vs. 5.4 , $p < .001$). Finally, the pictured models prompted similar age estimations ($28 < M < 31$ years) and appeared comparably credible in the role of a social sciences researcher ($4.3 < M < 4.7$; 7-point Likert scale).