

## Does “Handsome Male Appeal” Really Work: The Impact of Male Endorsement of Female Products on Female Consumers’ Product Evaluation

**Authors:** Wang Lili, Dong Menglu, Dong Menglu

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### Abstract

Is the advertising strategy of male endorsers for female products truly effective? This study aims to investigate the relationship between endorser gender for female products and female consumers’ evaluations of those products. Results from four experiments demonstrate that, compared to female endorsers for female products, female consumers’ evaluations of the product are significantly lower when it is endorsed by males. This effect is mediated by feelings of identity threat. Furthermore, identity affirmation moderates this effect. Specifically, when participants are subjected to female identity affirmation manipulation, the main effect is enhanced. This study empirically investigates the potential negative effects of male endorsement of female products, extending the downstream consequences of product gender attributes based on gender identity congruence theory.

### Full Text

## Does “Male Beauty” Really Work? The Impact of Male Endorsements on Female Consumers’ Evaluation of Female-Gender-Imaged Products

**WANG Lili, DONG Menglu**

(School of Management, Zhejiang University, Hangzhou 310058, China)

### Abstract

Does the advertising strategy of using male spokespersons to endorse female-gender-imaged products really work? This paper investigates the relationship between spokesperson gender for female-gender-imaged products and female consumers’ product evaluations. Four experiments reveal that when male (versus fe-

male) spokespersons endorse female-gender-imaged products, female consumers evaluate these products significantly less favorably. This effect is mediated by perceived gender-identity threat. Furthermore, gender affirmation moderates this effect: when participants receive a female identity affirmation manipulation, the main effect is strengthened. This research empirically demonstrates the potential negative consequences of male endorsements for female-gender-imaged products and extends the downstream consequences of product gender attributes based on gender-identity congruency theory.

**Keywords:** cross-gender endorsement, product evaluation, gender-identity threat, female identity affirmation, gender-identity congruency

## 1. Introduction

Traditional advertising creativity principles have been enriched by contemporary developments, giving rise to the widespread phenomenon of “male beauty appeal.” Advertising legend David Ogilvy (1963) proposed the “3B principle” of advertising creativity—Beauty, Beast, and Baby—where Beauty signifies sensuality and charm, most aligned with female product advertising. However, as gender-based social divisions of labor diminish and lifestyles and popular culture evolve, men have begun playing fundamentally different roles. The concept of Beauty in the 3B principle no longer exclusively represents female imagery but has expanded to include male beauty. Simultaneously, fueled by media technology and socio-economic development, the “fan economy” has emerged. As early as the 1990s, Japanese superstar Takuya Kimura endorsed KANEBO lipstick, generating remarkable sales in Japan’s depressed economy. This novel cross-gender endorsement approach attracted widespread attention from media, advertisers, and consumers alike. In the internet era, fan numbers translate not only into influence but also economic value.

Inviting popular male celebrities to cross-gender endorse female products represents advertisers’ attempt to cater to female consumers. Yet the advertising effects achieved through “male beauty appeal” —leveraging male celebrities’ influence and physical attractiveness—may not be sustainable. In recent years, debates have frequently erupted among female consumer markets regarding the appropriateness and effectiveness of cross-gender endorsements. Male celebrities endorsing strongly gendered female products such as feminine underwear or sanitary pads have invariably found themselves at the center of public controversy.

Following the 2015 revision of China’s Advertising Law, which requires that “advertising spokespersons shall not recommend or endorse products or services they have not used,” the wave of male endorsements for female intimate products temporarily subsided. However, the market has not abandoned cross-gender endorsement opportunities. In recent years, major beauty brands have extended offers to male idols, maternal and infant products have targeted celebrity fathers, and the rise of live-streaming and influencer marketing has broken traditional

endorsement boundaries. Male hosts selling female-exclusive products in live-streaming rooms has become commonplace, and advertisements featuring male celebrities promoting female intimate products through various platform-based sales formats are frequently observed. Does “male beauty appeal” in cross-gender endorsement truly deliver the positive effects advertisers anticipate? This paper theoretically identifies potential threats behind the superficial prosperity of cross-gender endorsement, empirically examines the increasingly negative impact of male endorsement strategies on female consumers’ product evaluations, constructs an internal mechanism with identity threat perception as the mediator, and further explores the moderating role of identity affirmation. By integrating consumers’ self-concept and identity consciousness, this research extends the downstream consequences of product gender attributes based on gender-identity congruency theory and provides recommendations for advertisers.

### 1.1 Advertising Gender Roles and Product Gender Attributes

Gender roles are tools advertisers use to portray male or female spokesperson images to promote brands and products. Eisend (2019) notes that research on gender roles in advertising primarily addresses three themes: evaluation of gender roles, advertising effectiveness of gender roles, and gender roles’ impact on consumers. Consumers’ attitudes toward spokesperson gender are closely related to product gender attributes, which originate from gender stereotypes. Gender stereotypes represent inherent beliefs that combine stereotypical notions with gender roles, labeling all individuals in a group with group characteristics (Wrightsmann & Deaux, 1981) and assuming that men and women possess different traits and psychological characteristics due to their gender. Keller (1998) integrated the concept of gender stereotypes with product attributes, noting that some products in the market have specific gender associations, enabling consumers to combine a brand’ s gender attributes with their own gender as a reference for selecting suitable products.

Historically, consumption has been largely gendered, with consumers frequently using gendered products and brands as tools to display gender identity (Avery, 2012). Numerous researchers have demonstrated that most products and services have clear gender attributes (Fugate & Philips, 2010; Stern et al., 1993), meaning gendered products typically carry male or female identity traits, indicating they are intended for specific gender categories (Avery, 2012). Gendered products often target only one gender trait while ignoring the other. Researchers speculate that product gender attributes are typically associated with the gender of those most likely to use the product (Debevec & Iyer, 1986; Golden et al., 1979), leading advertisers to position product gender attributes based on target consumers’ gender. For example, sanitary pad products typically hire female spokespersons to enhance advertising persuasiveness and improve consumer product evaluations.

Gender roles in advertising can produce positive or negative effects on product

evaluations. On one hand, employing gender roles in advertising can improve product evaluations and sales under certain circumstances (Windels, 2016). On the other hand, depictions of men and women in advertising can stimulate perceptions of gender stereotypes, particularly disadvantaging female consumers (Pounders, 2018; Tuncay Zayer & Coleman, 2015). Specifically, whether consumers evaluate gender roles in advertising positively or negatively depends on their cognitive schemas and expectations (Eisend, 2019). Only when perceived gender roles align with their cognitive schemas do positive advertising effects and product evaluations emerge (Jaffe & Berger, 1994; Orth & Holancova, 2004; Putrevu, 2004).

## 1.2 Cross-Gender Endorsement and Product Evaluation

Cross-gender endorsement refers to advertising endorsement patterns where the spokesperson's gender role contradicts the product's gender attributes. As social attitudes become increasingly open, fundamental transformations in male and female gender roles have occurred, making traditional, sharply distinct expectations regarding gender-based responsibilities and aspirations hybrid and ambiguous (Hupfer, 2002). For instance, men now perform more household chores and spend more time with children. Consequently, advertisers have begun contemplating what these massive social changes mean for advertising creation and re-evaluating their advertising strategies. Men have long constituted an important market force for female-targeted products (Abstrachan, 1984). Particularly with the rise of the fan economy, increasingly more female products have invited male spokespersons, making cross-gender endorsement rampant in the advertising world. From an existential philosophy perspective interpreting the "female-oriented" culture based on physical attraction, "male beauty consumption" that obtains primitive pleasure through bodily consumption represents a postmodernist consumption manifestation that can provide women with gender-reversal satisfaction and self-identity fulfillment. The cross-gender endorsement craze conceals women's desire for gender power redistribution (Liu, 2018).

It is important to clarify that because men and women differ sociologically, physiologically, psychologically, and culturally (Frieden, 2013), the advertising effects of these two types of cross-gender endorsements—male endorsement of female products versus female endorsement of male products—are asymmetric (Whipple & McManamon, 2002). This study focuses exclusively on male endorsement of female products.

Research indicates that both male and female consumers prefer products and spokespersons that align with their own gender traits (Fry, 1971). Kanungo and Pang (1973) found that when model gender in advertisements is inconsistent with product gender attributes, consumers' perception and attitude consistency is disrupted, resulting in unfavorable product quality perceptions. Friedman and Friedman (1979) proposed the match-up hypothesis, suggesting that spokesperson type and product type combinations affect advertising effectiveness. Forkan (1980) first applied the match-up hypothesis to celebrity endorsement, propos-

ing that the celebrity's core essence must align with the product. Kamins (1990) further noted that only when product characteristics match the image conveyed by the celebrity can the celebrity's physical attractiveness positively influence advertising evaluation. Additionally, previous research has highlighted the negative effects of traditional gender roles in advertising. Whipple and Courtney (1980) found that female consumers prefer free, progressive gender role portrayals in advertising over traditional female gender role depictions.

Based on gender-identity congruency theory, this paper argues that an individual's product use reflects their own image and identity to some extent, meaning product purchases provide consumers not only with functional attributes (Grubb & Grathwohl, 1967) but also serve as tools for self-identity expression (Belk, 1988). Marketing and psychological research consistently support the view that consumers engage in gender-congruent identification with their purchased products, believing product gender attributes should align with their own gender image. This occurs because consumers unconsciously connect their possessions with self-consciousness (Belk, 1988; Goffman, 1959) and define self-identity through product ownership and usage, thereby using products as tools for self-identification (Mittal, 2006). For example, when selecting products, consumers choose brands and goods that best fit their gender in their minds to create and maintain identity congruency (Belk, 1988; Holt & Thompson, 2004). Debevec and Iyer (1986) also note that cross-gender endorsement weakens the product's inherent gender attributes, blurring its originally clear gender traits and hindering consumer product selection. However, this research only explored product gender attributes from the product itself without deeply examining consumer reactions to cross-gender endorsed products. Evidence using cartoon images for target-gender-specific products (e.g., golf clubs, vacuum cleaners) similarly indicates that opposite-gender images reduce consumers' perception of product gender attribute strength (Peirce, 2001).

This paper argues that male endorsement of female products not only weakens product gender attributes but further reduces consumer product evaluations, thereby affecting product sales and promotion. We propose the following hypothesis:

**H1:** Compared to female endorsement of female-gender-imaged products, when male spokespersons endorse female-gender-imaged products, female consumers' evaluations of these products will be significantly lower.

### 1.3 The Mediating Effect of Female Identity Threat Perception

Since men have historically been considered the dominant gender in society, women have had to enhance social influence by participating in typically "male" activities (Walzer, 2002), creating strong demands for gender identity affirmation. Moreover, research indicates that women are more anxious and critical about gender stereotypes than men (Lull et al., 1977). Therefore, this paper argues that female consumers are more sensitive to cross-gender endorsement,

perceiving male endorsement of female products as questioning female identity and threatening their own gender identity. Extensive research shows that when individual identity is threatened, people possess strong motivation to resist and defend their identity (Baumeister et al., 1996). For example, Aquino and Douglas (2003) found that identity threat can trigger antisocial behavior, typically retaliatory reactions against perceived threat sources. Thus, when identity is threatened, individuals' behaviors tend to be negative and resistant. Consequently, advertisers avoid threatening target consumers' identities in ad creation, as doing otherwise would backfire, weakening brand impressions and even creating negative perceptions, thereby reducing purchase likelihood. Based on this, we propose:

**H2:** Identity threat perception mediates the main effect. Compared to female endorsement, male endorsement of female-gender-imaged products activates female consumers' self-identity threat perception, thereby reducing product evaluations.

#### 1.4 The Moderating Effect of Identity Affirmation

According to self-enhancement theory, maintaining a positive and comprehensive self-evaluation represents a fundamental human need or behavioral motive (Steele, 1988; Tesser, 1988). When individuals' positive self-identity is questioned or threatened, they experience psychological discomfort and take measures to maintain positive self-evaluation and reduce threat perception. Previous research has proposed numerous strategies to reduce such psychological discomfort. For instance, Tesser (1988) proposed in his self-evaluation maintenance model that individuals threatened in a particular domain minimize that domain's importance or distance themselves from high-performing individuals in that domain, choosing to associate with different groups. Additionally, Festinger (1957) argued that self-affirmation effectively reduces psychological discomfort caused by cognitive dissonance, even if it cannot eliminate actual inconsistency. Notably, the boundary condition for self-affirmation lies in whether individuals' self-assessment is positive. Even when threatened in a domain, if overall positive self-evaluation remains unaffected, individuals may acknowledge or even accept the threat rather than always employing self-affirmation to reduce threat perception. In summary, we argue that individuals' motivation to engage in identity affirmation depends on whether their current self-worth evaluation is positive or negative and the importance of the threatened domain.

Further research indicates that when the domain of identity affirmation relates to the domain of identity threat, self-defensiveness is activated, and identity threat perception intensifies (McQueen & Klein, 2006). This finding supports Steele's (1988) outlined method for maintaining or restoring individuals' comprehensive positive self-image and protecting it from threat: identity affirmation must occur in domains unrelated to identity threat to reduce dissonance effects (Blanton et al., 1997; Stone & Cooper, 2003). Therefore, identity affirmation can be viewed as a buffer when individuals are threatened or as a coping capa-

bility (Steele et al., 1993), rather than merely a temporary positive feeling or self-concept activation.

In summary, we argue that when identity affirmation domains relate to identity threat domains, individuals under self-defensiveness mechanisms further adopt avoidance or negative responses to identity threat. Specifically, male endorsement of female products activates female consumers' identity threat perception. If female consumers simultaneously engage in female identity affirmation—where both affirmation and threat domains concern gender—their self-defensiveness mechanisms are activated, leading to avoidance or negative coping strategies. We therefore propose:

**H3:** When female consumers engage in female identity affirmation, the negative effect of male endorsement of female-gender-imaged products will be further strengthened.

## 2. Experiment 1: Main Effect Test

Experiment 1 aimed to test whether female consumers evaluate female-gender-imaged products less favorably when endorsed by male versus female spokespersons, thereby validating the main effect (H1).

### 2.1 Design and Participants

This experiment recruited 145 female university students (median age = 18–25, mode age = 18–25) who received modest monetary compensation. Upon entering the laboratory, participants were randomly assigned to a single-factor between-subjects design (spokesperson gender for female-gender-imaged product: male vs. female). The male spokesperson group contained 72 participants, and the female spokesperson group contained 73.

### 2.2 Procedure

Female participants completed demographic information (age collected in intervals) before random assignment to scenarios featuring either male or female spokespersons. To eliminate celebrity and brand effects, this experiment employed a scenario-based method. Specifically, participants read the following description:

“Imagine you are walking in a subway station when you see a large billboard: a popular female celebrity (vs. popular male celebrity) endorsing a well-known brand's lipstick product.”

Subsequently, participants completed three items measuring the dependent variable “product evaluation,” adapted from previous research (Heitmann et al., 2007): “How would you evaluate this lipstick?” (1 = very bad, 7 = very good); “How much do you like this lipstick?” (1 = dislike very much, 7 = like very much);

“Your attitude toward this lipstick is” (1 = negative, 7 = positive) (Cronbach’s  $\alpha = 0.842$ ).

### 2.3 Data Analysis and Results

First, the three items were averaged to create the “product evaluation” index ( $M = 4.42$ ,  $SD = 0.86$ ). An independent samples t-test with spokesperson gender as the independent variable (female coded as 0, male as 1) and product evaluation as the dependent variable revealed a significant difference between conditions ( $t(143) = 2.01$ ,  $p = 0.046$ ,  $d = 0.34$ ). Specifically, product evaluations in the male spokesperson group ( $M = 4.27$ ,  $SD = 0.92$ ) were significantly lower than in the female spokesperson group ( $M = 4.56$ ,  $SD = 0.77$ ) (see [Figure 1: see original paper]), indicating that male endorsement of female products reduces consumer product evaluations, providing initial support for H1. A one-sample t-test comparing the male spokesperson group’s evaluations to the scale midpoint (4) showed evaluations significantly above the midpoint ( $t(71) = 2.52$ ,  $p = 0.014$ ), suggesting male endorsement may have some positive impact on female product evaluations, though still lower than female endorsement.

### 2.4 Discussion

[Figure 1: see original paper] shows the main effect tests for Experiments 1-3.

Experiment 1 preliminarily validated the main effect: male (vs. female) endorsement of female-gender-imaged products leads to lower product evaluations. Using an everyday consumption scenario enhanced the applicability of the findings. Subsequent experiments employ different manipulation methods and scenario designs to verify the robustness of the main effect and test the mediating mechanism.

## 3. Experiment 2A: Mediating Effect of Identity Threat Perception

This experiment aimed to validate the internal mechanism of the main effect—the mediating role of identity threat perception in the negative effect of cross-gender endorsement (H2)—using a different experimental scenario.

### 3.1 Design and Participants

This experiment recruited 119 female participants (median age = 26-30, mode age = 18-25) from a Chinese online survey platform, covering diverse age groups, occupations, and living standards to enhance result persuasiveness. As in Experiment 1, participants were randomly assigned to a single-factor between-subjects design (spokesperson gender: male vs. female), with 61 in the male spokesperson group and 58 in the female spokesperson group.

### 3.2 Procedure

First, participants completed demographic information (including age and gender, with age in intervals). To ensure all participants were female, the survey screened by gender, terminating male respondents.

After demographics, participants read the following scenario:

“Imagine you are walking down the street when you see a bus stop billboard displaying an advertisement for a maternity hospital endorsed by a female spokesperson (vs. male spokesperson).” (see [Figure 2: see original paper])

[Figure 2: see original paper] shows the scenario image for Experiment 2A.

Next, participants completed the same product evaluation scale as Experiment 1: “How would you evaluate this maternity hospital?” (1 = very bad, 7 = very good); “How much do you like this maternity hospital?” (1 = dislike very much, 7 = like very much); “Your attitude toward this maternity hospital is” (1 = negative, 7 = positive) (Cronbach’s  $\alpha = 0.948$ ).

Subsequently, participants completed the identity threat perception scale, adapted from previous research (Yogeeswaran & Dasgupta, 2014): “In female-dominated product domains, advertisements should use female models to avoid diluting female identity” ; “Using male models in advertisements for female-dominated products challenges the essence of what it means to be female” ; “Using male models in female-dominated products threatens women’s uniqueness” (1 = strongly disagree, 7 = strongly agree) (Cronbach’s  $\alpha = 0.877$ ).

### 3.3 Data Analysis and Results

**Product Evaluation.** After coding spokesperson gender (female = 0, male = 1) as the independent variable, an independent samples t-test revealed a significant effect on product evaluation ( $t(117) = 2.12, p = 0.036, d = 0.38$ ). Product evaluations in the male spokesperson group ( $M = 3.32, SD = 1.00$ ) were significantly lower than in the female spokesperson group ( $M = 3.77, SD = 1.32$ ), again supporting H1. A one-sample t-test comparing the male spokesperson group’s evaluations to the scale midpoint (4) showed evaluations significantly below the midpoint ( $t(60) = -5.36, p < 0.001$ ), indicating a substantially negative impact of male endorsement on female product evaluations in Experiment 2A.

**Identity Threat Perception.** An independent samples t-test with spokesperson gender as the independent variable and identity threat perception as the dependent variable revealed that identity threat perception was significantly higher in the male spokesperson group ( $M = 4.39, SD = 1.51$ ) than in the female spokesperson group ( $M = 3.74, SD = 1.33; t(117) = 2.12, p = 0.036, d = 0.38$ ).

**Mediation Analysis.** A bootstrap test of the indirect mediation effect a  $\times$

b (PROCESS Model 4; Hayes, 2013) was conducted, where “a” represents the effect of spokesperson gender on identity threat perception and “b” represents the effect of identity threat perception on product evaluation (Hayes, 2013; Zhao et al., 2010). With 5,000 bootstrap samples and a 95% confidence interval, analysis revealed a significant negative indirect effect ( $a \times b = -0.12$ , 95%CI [-0.32, -0.02]). Male endorsement of female products increased identity threat perception ( $a = 0.65$ ;  $t(117) = 2.49$ ,  $p = 0.014$ ), which in turn significantly reduced product evaluation ( $b = -0.19$ ,  $t(116) = -2.57$ ,  $p = 0.012$ ). Finally, the direct effect of spokesperson gender on product evaluation was non-significant ( $c' = -0.33$ ,  $t(116) = -1.54$ ,  $p = 0.127$ ; see [Figure 3: see original paper]). Thus, Experiment 2A demonstrates that identity threat perception significantly mediates the effect, supporting H2.

[Figure 3: see original paper] shows the mediating role of identity threat perception in Experiment 2.

### 3.4 Discussion

Using a different experimental scenario, Experiment 2 replicated the main effect: male (vs. female) endorsement of female-gender-imaged products adversely affects product evaluations, demonstrating robustness. Importantly, Experiment 2A also validated the mediating mechanism—male endorsement activates female consumers’ identity threat perception, leading to significantly lower product evaluations than female endorsement. Using intuitive images made the scenario more realistic, enhancing ecological validity. Subsequent experiments will further validate the mechanism through moderation.

## 4. Experiment 2B: Robustness Test with Real Celebrity Endorsement

This experiment aimed to test the robustness of the mediating mechanism using real celebrity endorsement scenarios, ruling out alternative mediating explanations (shyness and shame). Additionally, it used a different female product—lingerie—to further validate main effect robustness.

### 4.1 Design and Participants

This experiment recruited 136 female university students (median age = 18-25, mode age = 18-25) who received modest monetary compensation. Participants were randomly assigned to a single-factor between-subjects design (spokesperson gender: male vs. female), with 68 in each group.

The celebrity materials featured Ren Zhong (male, age 41, 9.18 million Weibo followers) and Wan Qian (female, age 39, 7 million Weibo followers), selected for similar ages, follower counts, and status as lead actors in multiple TV dramas.

## 4.2 Procedure

After completing demographic information (age in intervals), participants read the following scenario:

“Imagine you are shopping for women’ s lingerie and see a website displaying an advertisement for a brand’ s women’ s lingerie endorsed by a male celebrity.” (see [Figure 4: see original paper])

[Figure 4: see original paper] shows the scenario image for Experiment 2B.

Subsequently, participants completed the product evaluation scale: “How would you evaluate this brand’ s lingerie?” (1 = very bad, 7 = very good); “How much do you like this brand’ s lingerie?” (1 = dislike very much, 7 = like very much); “Your attitude toward this brand’ s lingerie is” (1 = negative, 7 = positive) (Cronbach’ s  $\alpha = 0.962$ ).

Next, participants completed the identity threat perception scale (Yogeeswaran & Dasgupta, 2014): “In female-dominated product domains, advertisements should use female models to avoid diluting female identity”; “Using male models in advertisements for female-dominated products challenges the essence of what it means to be female” ; “Using male models in female-dominated products threatens women’ s uniqueness” (1 = strongly disagree, 7 = strongly agree) (Cronbach’ s  $\alpha = 0.689$ ).

To rule out alternative mediating explanations, participants also completed measures of shyness and shame: “Using male models in female-dominated products makes me feel shy” ; “Using male models in female-dominated products makes me feel ashamed” (1 = strongly disagree, 7 = strongly agree).

Additionally, participants rated celebrity familiarity (Simonin & Ruth, 1998) and attractiveness (Ohanian, 1990): “Please indicate how familiar you are with the spokesperson in this advertisement” (1 = unfamiliar, 7 = very familiar; 1 = don’ t know, 7 = know; 1 = never heard of, 7 = have heard of) (Cronbach’ s  $\alpha = 0.956$ ); “Please evaluate the spokesperson in the advertisement” (1 = not at all attractive, 7 = very attractive; 1 = not at all sexy, 7 = very sexy) ( $r = 0.842$ ).

## 4.3 Data Analysis and Results

**Product Evaluation.** After coding spokesperson gender (female = 0, male = 1), an independent samples t-test revealed a significant effect on product evaluation ( $t(134) = 15.04$ ,  $p < 0.001$ ,  $d = 2.59$ ). Product evaluations in the male spokesperson group ( $M = 2.25$ ,  $SD = 0.86$ ) were significantly lower than in the female spokesperson group ( $M = 4.65$ ,  $SD = 0.99$ ), again supporting H1. A one-sample t-test comparing the male spokesperson group’ s evaluations to the scale midpoint (4) showed evaluations significantly below the midpoint ( $t(67) = -16.65$ ,  $p < 0.001$ ), indicating a significant negative impact of real male celebrity endorsement on female product evaluations.

**Potential Mediating Mechanisms.** Independent samples t-tests with spokesperson gender as the independent variable and identity threat perception, shyness, and shame as dependent variables revealed that identity threat perception was significantly higher in the male spokesperson group ( $M = 4.89$ ,  $SD = 1.15$ ) than in the female spokesperson group ( $M = 4.44$ ,  $SD = 1.36$ ;  $t(134) = -2.12$ ,  $p = 0.036$ ,  $d = 0.36$ ). No significant differences emerged for shyness ( $M_{\text{male}} = 3.74$ ,  $SD = 1.78$  vs.  $M_{\text{female}} = 4.07$ ,  $SD = 1.72$ ;  $t(134) = 1.13$ ,  $p = 0.263$ ) or shame ( $M_{\text{male}} = 3.40$ ,  $SD = 1.68$  vs.  $M_{\text{female}} = 3.56$ ,  $SD = 1.65$ ;  $t(134) = 0.57$ ,  $p = 0.162$ ).

**Multiple Mediation Analysis.** A bootstrap test of indirect mediation effects  $a \times b$  (PROCESS Model 4; Hayes, 2013) was conducted, where “a” represents the effect of spokesperson gender on identity threat perception, shyness, and shame, and “b” represents their effects on product evaluation (Hayes, 2013; Zhao et al., 2010). With 5,000 bootstrap samples and a 95% confidence interval, controlling for celebrity familiarity and attractiveness, analysis revealed a significant negative indirect effect for identity threat perception ( $a1 \times b1 = -0.09$ , 95%CI [-0.26, -0.01]), but non-significant effects for shyness ( $a2 \times b2 = 0.05$ , 95%CI [-0.05, 0.27]) and shame ( $a3 \times b3 = -0.06$ , 95%CI [-0.24, 0.02]). Male endorsement increased identity threat perception ( $a1 = 0.74$ ;  $t(132) = 2.10$ ,  $p = 0.038$ ) without affecting shyness ( $a2 = 0.45$ ;  $t(132) = 0.92$ ,  $p = 0.357$ ) or shame ( $a3 = 0.53$ ;  $t(132) = 1.15$ ,  $p = 0.252$ ). Identity threat perception significantly reduced product evaluation ( $b1 = -0.12$ ,  $t(129) = -2.15$ ,  $p = 0.034$ ), as did shame ( $b3 = -0.12$ ,  $t(129) = -2.12$ ,  $p = 0.036$ ), while shyness had a significant positive effect ( $b2 = 0.12$ ,  $t(129) = 2.23$ ,  $p = 0.028$ ). Finally, spokesperson gender had a significant direct effect on product evaluation ( $c' = -1.07$ ,  $t(129) = -4.79$ ,  $p < 0.001$ ; see [Figure 5: see original paper]). Thus, Experiment 2B demonstrates that the mediating role of identity threat perception is robust in real celebrity endorsement contexts and rules out alternative explanations of shyness and shame, again supporting H2.

[Figure 5: see original paper] shows the mediating role of identity threat perception in Experiment 2B.

#### 4.4 Discussion

Using real celebrity endorsement, this experiment demonstrates that male (vs. female) endorsement of female-gender-imaged products significantly negatively impacts female consumers’ product evaluations even under real celebrity influence, enhancing ecological validity. The multiple mediation analysis ruled out shyness and shame as alternative explanations, confirming the robustness of identity threat perception as the mediating mechanism. However, images of female spokespersons wearing the product in this experiment might have altered perceived authenticity, potentially affecting product evaluations in unknown ways. Future experiments will control for spokesperson product-wearing cues to test main effect robustness and further validate the mechanism through moderation.

## 5. Experiment 3: The Moderating Role of Identity Affirmation

This experiment had three objectives. First, it sought to provide further theoretical and experimental support for the mediating mechanism (H2) through moderation testing (Spencer et al., 2005). If male endorsement of female products increases female consumers' identity threat perception, then highlighting female identity should strengthen this effect. Second, to demonstrate that Hypotheses 1 and 2 are not culturally bound, this experiment examined attitudes of female participants in a Western context. Third, using lingerie products as in Experiment 2B, this experiment controlled for spokesperson upper-body product-wearing cues to test main effect robustness.

### 5.1 Design and Participants

Two hundred fifty female participants from Amazon's MTurk platform ( $M_{\text{age}} = 36.49$ ,  $SD_{\text{age}} = 12.03$ ) were randomly assigned to a 2 (spokesperson gender: male vs. female)  $\times$  2 (female identity affirmation: present vs. absent) between-subjects design. The groups consisted of: male spokesperson  $\times$  identity affirmation ( $n = 63$ ), male spokesperson  $\times$  control ( $n = 70$ ), female spokesperson  $\times$  identity affirmation ( $n = 54$ ), and female spokesperson  $\times$  control ( $n = 63$ ).

### 5.2 Procedure

Following the same female participant recruitment method as Experiment 2A, participants were randomly assigned to identity affirmation or control conditions. In the identity affirmation condition, participants wrote about important qualities and values of women and provided reasons (Fein & Spencer, 1997; Steele, 1988). In the control condition, participants listed 20 everyday items that came to mind.

Next, participants were told they were browsing an online shopping platform intending to purchase women's lingerie. They viewed a webpage featuring lingerie endorsed by a popular female celebrity (vs. popular male celebrity) (see [Figure 6: see original paper]) and then completed the same product evaluation scale as previous experiments (Cronbach's  $\alpha = 0.954$ ,  $M = 3.94$ ,  $SD = 1.50$ ).

[Figure 6: see original paper] shows the scenario image for Experiment 3.

### 5.3 Data Analysis and Results

**Product Evaluation.** An independent samples t-test again confirmed a significant main effect ( $t(238) = 5.64$ ,  $p < 0.001$ ;  $d = 0.70$ ), with product evaluations in the male spokesperson group ( $M = 3.48$ ,  $SD = 1.62$ ) significantly lower than in the female spokesperson group ( $M = 4.47$ ,  $SD = 1.16$ ) (see [Figure 1: see original paper]). A one-sample t-test comparing the male spokesperson group's evaluations to the scale midpoint (4) showed evaluations marginally signifi-

cantly below the midpoint ( $t(132) = -3.71, p < 0.001$ ), indicating a substantial negative impact of male endorsement on female product evaluations.

**Moderation Analysis.** A 2 (spokesperson gender)  $\times$  2 (female identity affirmation) ANOVA on product evaluation revealed a marginally significant interaction ( $F(1, 246) = 3.13, p = .078, p^2 = 0.013$ ). The main effect of spokesperson gender was significant ( $F(1, 246) = 31.72, p < 0.001, p^2 = 0.11$ ), while the main effect of identity affirmation was non-significant ( $F(1, 246) = 0.44, p = 0.509, p^2 = 0.002$ ). Thus, female identity affirmation moderates the effect of spokesperson gender on product evaluation.

Simple effects analysis revealed that in the control condition, the experiment replicated previous results: male endorsement reduced product evaluations ( $M_{\text{male}} = 3.69, SD = 1.50$  vs.  $M_{\text{female}} = 4.38, SD = 1.03; t(246) = 2.82, p = 0.005; d = 0.54$ ). However, in the identity affirmation condition, this negative effect was strengthened ( $M_{\text{male}} = 3.25, SD = 1.72$  vs.  $M_{\text{female}} = 4.58, SD = 1.29; t(246) = 5.07, p < 0.001; d = 0.87$ ). One-sample t-tests showed male spokesperson evaluations were marginally significantly below the midpoint in both the control condition ( $t(69) = -1.75, p = 0.085$ ) and identity affirmation condition ( $t(62) = -3.47, p = 0.001$ ).

Critically, results showed that when brands used female spokespersons, identity affirmation did not affect product evaluations ( $M_{\text{affirmation}} = 4.58, SD = 1.29$  vs.  $M_{\text{control}} = 4.38, SD = 1.03; t(246) = 0.76, p = 0.449; d = 0.17$ ). However, when brands used male spokespersons, product evaluations in the identity affirmation condition ( $M = 3.25, SD = 1.72$ ) were marginally significantly lower than in the control condition ( $M = 3.69, SD = 1.50; t(246) = 1.78, p = 0.077; d = 0.27$ ) (see [Figure 7: see original paper]), supporting H3.

[Figure 7: see original paper] shows the moderating effect of female identity affirmation on the main effect.

## 5.4 Discussion

Experiment 3 replicated previous findings that male (vs. female) endorsement of female-gender-imaged products reduces product evaluations. It further demonstrated that this negative effect strengthens when female identity is affirmed. Additionally, compared to the control condition, female identity affirmation further reduced product evaluations under male endorsement, providing further evidence that the negative effect is driven by female identity threat perception. This experiment also confirmed the mechanism's cross-cultural validity using Western participants.

## 6. General Discussion

### 6.1 Research Conclusions

This paper examined the relationship between spokesperson gender for female-gender-imaged products and female consumers' product evaluations. Address-

ing female consumers' self-concept and identity consciousness, Experiment 1 initially validated the main effect: female consumers evaluate male-endorsed female-gender-imaged products significantly less favorably than female-endorsed products. Experiments 2 and 3 further established the main effect' s stability (see [Figure 1: see original paper]). Experiment 2 investigated the mediating mechanism—spokesperson gender influences product evaluation through female consumers' perceived identity threat—validating effect robustness across cartoon and real celebrity endorsement scenarios while ruling out alternative explanations, supporting H2. To further validate the internal mechanism, Experiment 3 strengthened perceived threat through identity affirmation manipulation, finding that the main effect intensified when participants engaged in identity affirmation, thereby validating the moderating role of identity affirmation and supporting H3.

Additionally, this research found that for lipstick products, male endorsement can still generate some positive effects, though evaluations remain lower than with female endorsement. However, as product exclusivity and privacy increased across experiments (maternity hospital services, lingerie), male endorsement exhibited severe negative effects.

To further analyze how exclusivity and privacy moderate the main effect, we conducted a pooled analysis of data from all four experiments ( $N = 650$ ; female spokesperson group  $n = 316$ , male spokesperson group  $n = 334$ ). An independent samples t-test on the pooled data again confirmed a significant main effect ( $t(629) = 10.36$ ,  $p < 0.001$ ;  $d = 0.81$ ), with product evaluations in the male spokesperson group ( $M = 3.37$ ,  $SD = 1.41$ ) significantly lower than in the female spokesperson group ( $M = 4.40$ ,  $SD = 1.12$ ). One-sample t-tests showed male spokesperson evaluations significantly below the midpoint ( $t(333) = -8.16$ ,  $p < 0.001$ ) and female spokesperson evaluations significantly above the midpoint ( $t(315) = 6.38$ ,  $p < 0.001$ ), indicating an overall negative impact of male endorsement on female product evaluations.

Furthermore, 103 female university students ( $M = 22.72$ ,  $SD = 2.73$ ) rated the perceived female exclusivity and privacy of the experimental materials (lipstick, maternity hospital services, women' s lingerie) on 7-point scales for modest compensation. One-sample t-tests comparing exclusivity ratings to the midpoint (4) showed all products rated significantly above the midpoint (see ). Privacy rating comparisons to the midpoint revealed lipstick rated significantly below the midpoint, while maternity hospital services and lingerie rated significantly above it (see ).

shows descriptive statistics and one-sample t-test results for product female exclusivity.

shows descriptive statistics and one-sample t-test results for product privacy.

Pairwise comparisons of exclusivity via independent samples t-tests revealed lipstick differed significantly from the other two products ( $t(191)\{maternity\} = -7.13$ ,  $p < 0.001$ ,  $d = -0.99$ ;  $t(191)\{lingerie\} = -7.67$ ,  $p < 0.001$ ,  $d = -1.07$ ), while

maternity hospital services and lingerie did not differ significantly, indicating increasing female exclusivity from lipstick to maternity services/lingerie. Pairwise privacy comparisons showed lipstick differed significantly from the other two products ( $t(204)\{maternity\} = -9.88, p < 0.001, d = -1.38$ ;  $t(198)\{lingerie\} = -14.21, p < 0.001, d = -1.98$ ), and maternity services differed significantly from lingerie ( $t(204)\{lingerie\} = -3.50, p = 0.001, d = -0.49$ ), indicating increasing privacy from lipstick to maternity services to lingerie.

A  $2 \times 2$  ANOVA on the pooled data with exclusivity (coded 1 = lipstick, 2 = maternity services/lingerie) and spokesperson gender as independent variables and product evaluation as the dependent variable revealed significant main effects for exclusivity ( $F(1, 646) = 34.09, p < 0.001, p^2 = 0.050$ ) and spokesperson gender ( $F(1, 646) = 41.72, p < 0.001, p^2 = 0.062$ ), and a significant interaction ( $F(1, 646) = 16.69, p < 0.001, p^2 = 0.025$ ). Simple effects analysis showed that under female endorsement, exclusivity did not significantly affect product evaluations ( $M_{lipstick} = 4.56, SD = 0.77$  vs.  $M_{maternity/lingerie} = 4.35, SD = 1.20$ ;  $t(646) = -1.24, p = 0.216; d = 0.21$ ). However, under male endorsement, evaluations for high-exclusivity products (maternity services/lingerie;  $M = 3.12, SD = 1.42$ ) were significantly lower than for low-exclusivity lipstick ( $M = 4.27, SD = 0.92$ ;  $t(646) = -7.03, p < 0.001; d = 0.96$ ). Thus, the negative effect of male endorsement intensifies with increasing product female exclusivity.

A  $3 \times 2$  ANOVA on the pooled data with privacy (coded 1 = lipstick, 2 = maternity services, 3 = lingerie) and spokesperson gender as independent variables revealed significant main effects for privacy ( $F(2, 644) = 19.48, p < 0.001, p^2 = 0.057$ ) and spokesperson gender ( $F(1, 644) = 46.34, p < 0.001, p^2 = 0.067$ ), and a significant interaction ( $F(2, 644) = 16.62, p < 0.001, p^2 = 0.049$ ). Simple effects analysis revealed that under female endorsement, lipstick (lowest privacy) received significantly higher evaluations than maternity services (moderate privacy;  $M_{lipstick} = 4.56, SD = 0.77$  vs.  $M_{maternity} = 3.77, SD = 1.32$ ;  $t(644) = 3.69, p < 0.001; d = 0.73$ ), but did not differ from lingerie (highest privacy;  $M_{lipstick} = 4.56, SD = 0.77$  vs.  $M_{lingerie} = 4.54, SD = 1.10$ ;  $t(644) = 0.12, p = 0.904; d = 0.02$ ), while maternity services evaluations were significantly lower than lingerie ( $t(644) = -4.19, p < 0.001; d = 0.63$ ). Under male endorsement, lipstick evaluations were significantly higher than both maternity services ( $M_{lipstick} = 4.27, SD = 0.92$  vs.  $M_{maternity} = 3.32, SD = 1.00$ ;  $t(644) = 4.53, p < 0.001; d = 0.99$ ) and lingerie ( $M_{lipstick} = 4.27, SD = 0.92$  vs.  $M_{lingerie} = 3.06, SD = 1.52$ ;  $t(644) = 7.23, p < 0.001; d = 0.96$ ), while maternity services and lingerie did not differ significantly ( $t(644) = 1.42, p = 0.155; d = 0.20$ ). These results show that for non-private products like lipstick, male endorsement still yields lower evaluations than female endorsement. The negative effect of male endorsement intensifies with privacy up to a point, after which the intensification ceases. For female endorsement, privacy's effect on evaluations was unexpected—consumers evaluating private products/services may be influenced by embarrassment, opposite-gender accompaniment, privacy invasion, and other factors warranting future investigation.

## 6.2 Theoretical Contributions

Most domestic and international literature on advertising spokespersons has only descriptively or logically explained the phenomenon of male celebrities endorsing female products. In contrast, this paper empirically investigates the potential negative effects of male endorsement of female-gender-imaged products through systematic scientific methods, reveals the internal psychological mechanism mediated by identity threat perception, and identifies the moderating role of identity affirmation.

First, this research extends traditional studies on product gender attributes. Previous research noted that cross-gender endorsement weakens product gender attributes, making identification and selection difficult for consumers (Debevec & Iyer, 1986), focusing only on product attributes. Other research suggested that using product-gender-inconsistent models in advertising might disrupt consumer perception-attitude consistency, reducing product quality recognition (Kanungo & Pang, 1973). However, product quality dimensions lacked scientific rigor and universality, and early research only proposed possible consistency theory effects without detailed elaboration, resulting in insufficient theoretical depth. These studies focused on product-spokesperson match and cognitive coordination, emphasizing positive effects of consistency, without deeply discussing gender-identity congruency theory as an internal mechanism. This paper empirically examines negative consequences of inconsistency and, based on gender-identity congruency theory, explores downstream consequences beyond product gender attribute effects—namely, consumer evaluations of cross-gender endorsed products—providing greater practical value.

Furthermore, grounded in gender-identity congruency theory and using gender stereotypes as an entry point, this research integrates self-concept and identity consciousness theories (Baumeister et al., 1996; Aquino & Douglas, 2003), emphasizes products' influence on consumer self-identification and self-expression, and proposes identity threat perception as the mediating mechanism through which cross-gender endorsement of female products reduces female consumers' evaluations. Moreover, this research further investigated a moderator of this main effect—identity affirmation—testing whether when affirmation and threat domains both concern gender, people employ more avoidant or negative self-defense (McQueen & Klein, 2006), thereby strengthening the negative impact of cross-gender endorsement on product evaluations.

## 6.3 Practical Implications

This research offers important insights for real-world advertising and marketing design. First, advertisers must attend to and understand target consumers' psychological feelings and genuine thoughts when encountering novel advertising formats, considering how to attract attention without triggering resistance or dissatisfaction, and how to select spokespersons that lock in potential consumers and stimulate purchase intentions. Second, spokesperson characteristics should

align with brand tonality, which is key to optimizing advertising endorsement and brand communication effects. Only then can better promotional outcomes, persuasive power, consumer trust, and effective brand connotation communication be achieved, enhancing brand loyalty.

Finally, this research finds that male endorsement of female products makes female consumers perceive identity threat. More importantly, the negative effect intensifies with increasing product female exclusivity, and privacy also strengthens the negative effect within certain boundaries. Previous research indicates that when experiencing identity threat, people often adopt negative coping strategies. Therefore, consumers are likely to ignore, avoid purchasing, or even develop resistant attitudes. With the rise of “Lipstick King” Li Jiaqi, increasingly more advertisers select male hosts or celebrities to endorse female products. For products with relatively low female exclusivity and privacy like lipstick, male endorsement may still have some positive impact, but as female exclusivity and privacy increase—involving products like sanitary pads and lingerie—eliminating female consumers’ perceived identity threat becomes a crucial consideration in advertising design. For example, having male spokespersons play caring boyfriend roles or considerate friend roles when endorsing female products may help female consumers better accept this novel endorsement approach.

#### 6.4 Limitations and Future Directions

First, while this paper discusses the relationship between spokesperson gender for female products and female consumers’ evaluations and purchase intentions, the products used include not only strongly gendered products like lipstick but also female-exclusive services like maternity hospitals and private female-exclusive products like lingerie. This research finds that product female exclusivity intensifies the negative effect of male endorsement, possibly by reducing perceived match between product category attributes and spokesperson. Whether this effect persists for low-exclusivity products (e.g., skincare, high heels) warrants further exploration. Additionally, privacy interacts with the main effect, but its intensifying effect has boundary conditions potentially influenced by embarrassment, opposite-gender accompaniment, privacy invasion, and other factors requiring more rigorous product/service selection in future research. In summary, identity threat perception may not be the sole mechanism underlying male endorsement’s negative effects; enriching and refining the mediating mechanism requires future investigation.

Second, self-identity vulnerability may constitute a boundary condition for cross-gender endorsement effects. Gender-identity congruency theory posits that consumers unconsciously use possessions as self-identification tools (Mittal, 2006). Gender identity is part of self-identity; the negative effect of male endorsement on female consumers’ evaluations is based on self-identity. Consumers lacking self-identity confidence may more readily detect identity threat, while female consumers with high self-identity may not trigger psychological defense mechanisms in response to cross-gender endorsement.

Moreover, this research focuses on spokesperson biological sex, examining biologically defined cross-gender endorsement effects. However, social and cultural factors construct broader masculinity and femininity (Spence & Helmreich, 1979); whether male spokespersons with feminine traits trigger female consumers' identity threat requires future examination.

Additionally, this research discusses general cross-gender advertising endorsement, using "endorsement" as stimuli without emphasizing or distinguishing traditional advertising from live-stream sales. With live-streaming's rapid development, the role overlap between hosts and advertising spokespersons and legal applicability warrant further discussion. Future research should examine whether this paper's mechanisms persist in the specific context of live-stream sales.

Furthermore, Experiment 2B selected male and female celebrities with relatively stable popularity and similar follower counts. For super-popular celebrities, the mechanism may change. The long-term nature of super-popular celebrities' influence and endorsement effects is highly uncertain. While businesses invest heavily in super-popular celebrity collaborations hoping to boost single-product sales and evaluations, these partnerships are more likely tied to overall brand and market strategies. Whether comparable female celebrities with similar influence exist during the same period may also factor into advertisers' spokesperson selection decisions. Whether super-popular male celebrities' cross-gender endorsement produces negative effects and how such effects impact overall brands requires future investigation.

Future research could also examine whether male spokespersons playing warm male roles in gift-giving scenarios can mitigate or even reverse cross-gender endorsement's negative effects.

Finally, laboratory research has limitations; future research obtaining secondary data from real consumption contexts would enhance conclusion persuasiveness.

## References

- Abstrachan, A. (1984). Marketing to men. *Advertising Age*, 4, 11-13.
- Aquino, K., & Douglas, S. (2003). Identity threat and antisocial behavior in organizations: The moderating effects of individual differences, aggressive modeling, and hierarchical status. *Organizational Behavior and Human Decision Processes*, 90, 195-208.
- Avery, J. (2012). Defending the markers of masculinity: Consumer resistance to brand gender-bending. *International Journal of Research in Marketing*, 29, 322-336.
- Baumeister, R. F., Smart, L., & Boden, J. M. (1996). Relation of threatened egotism to violence and aggression: The dark side of high self-esteem. *Psychological Review*, 103, 5-33.

- Belk, R. W. (1988). Possessions and the extended self. *Journal of Consumer Research*, 15, 139-168.
- Blanton, H., Cooper, J., Slkurnik, I., & Aronson, J. (1997). When bad things happen to good feedback: Exacerbating the need for self-justification with self-affirmations. *Personality and Social Psychology Bulletin*, 23, 684-692.
- Debevec, K., & Iyer, E. (1986). The influence of spokespersons in altering a product' s gender image: Implications for advertising effectiveness. *Journal of Advertising*, 15, 12-20.
- Eisend, M. (2019). Gender roles. *Journal of Advertising*, 48, 72-80.
- Festinger, L. (1957). *A theory of cognitive dissonance* (Vol. 2). Stanford University Press.
- Fein, S., & Spencer, S. J. (1997). Prejudice as self-image maintenance: Affirming the self through derogating others. *Journal of Personality and Social Psychology*, 73, 31-44.
- Fugate, D. L., & Phillips, J. (2010). Product gender perceptions and antecedents of product gender congruence. *Journal of Consumer Marketing*, 27, 251-261.
- Forkan, J. (1980). Product match-up key to effective star presentations. *Advertising Age*, 51, 42-58.
- Frieden, L. R. (2013). *The role of consumer gender identity and brand concept consistency in evaluating cross-gender brand extensions*. Retrieved January 23, 2017, from <http://scholarcommons.usf.edu/etd/4488/>
- Friedman, H. H., & Friedman, L. (1979). Endorser effectiveness by product type. *Journal of Advertising Research*, 19, 63-71.
- Fry, J. N. (1971). Personality variables and cigarette brand choice. *Journal of Marketing Research*, 8, 298-304.
- Goffman, E. (1959). *The presentation of self in everyday life*. New York: Doubleday.
- Golden, L. L., Allison, N., & Clee, M. (1979). The role of sex role self-concept in masculine and feminine product perceptions. *Advances in Consumer Research*, 6, 599-605.
- Grubb, E. L., & Grathwohl, H. L. (1967). Consumer self-concept, symbolism and market behavior: A theoretical approach. *Journal of Marketing*, 31, 22-27.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Publications.
- Heitmann, M., Lehmann, D. R., & Herrmann, A. (2007). Choice goal attainment and decision and consumption satisfaction. *Journal of Marketing Research*, 44, 234-250.

- Holt, D. B., & Thompson, C. J. (2004). Man-of-action heroes: The pursuit of heroic masculinity in everyday consumption. *Journal of Consumer Research*, 31, 425-440.
- Hupfer, M. (2002). Communicating with the agentic woman and the communal man: Are stereotypic advertising appeals still relevant. *Academy of Marketing Science Review*, 3, 1-15.
- Jaffe, L. J., & Berger, P. D. (1994). The effect of modern female sex role portrayals on advertising effectiveness. *Journal of Advertising Research*, 34, 32-42.
- Kamins, M. A. (1990). An investigation into the "match-up" hypothesis in celebrity advertising: When beauty may be only skin deep. *Journal of Advertising*, 19, 4-13.
- Kanungo, R. N., & Pang, S. (1973). Effects of human models on perceived product quality. *Journal of Applied Psychology*, 57, 172-178.
- Keller, K. L. (1998). Branding perspectives on social marketing. *Advances in Consumer Research*, 25, 299-302.
- Lull, J. T., Hanson, C. A., & Marx, M. J. (1977). Recognition of female stereotypes in TV commercials. *Journalism Quarterly*, 54, 153-157.
- McQueen, A., & Klein, W. M. (2006). Experimental manipulations of self-affirmation: A systematic review. *Self and Identity*, 5, 289-354.
- Mittal, B. (2006). I, me, and mine—how products become consumers' extended selves. *Journal of Consumer Behaviour: An International Research Review*, 5, 550-562.
- Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. *Journal of Advertising*, 19, 39-52.
- Ogilvy, D. (1963). *Confessions of an advertising man*. New York: Ballantine.
- Orth, U. R., & Holancova, D. (2004). Men's and women's responses to sex role portrayals in advertisements. *International Journal of Research in Marketing*, 21, 77-88.
- Peirce, K. (2001). What if the energizer bunny were female? Importance of gender in perceptions of advertising spokes-character effectiveness. *Sex Roles*, 45, 845-858.
- Pounders, K. (2018). Are portrayals of female beauty in advertising finally changing?. *Journal of Advertising Research*, 58, 133-137.
- Putrevu, S. (2004). Communicating with the sexes: male and female responses to print advertisements. *Journal of Advertising*, 33, 51-62.

- Simonin, B. L., & Ruth, J. A. (1998). Is a company known by the company it keeps? Assessing the spillover effects of brand alliances on consumer brand attitudes. *Journal of Marketing Research*, 35, 30-42.
- Spence, J. T., & Helmreich, R. L. (1979). *Masculinity and femininity: Their psychological dimensions, correlates, and antecedents*. University of Texas Press.
- Spencer, S. J., Zanna, M. P., & Fong, G. T. (2005). Establishing a causal chain: why experiments are often more effective than mediational analyses in examining psychological processes. *Journal of Personality and Social Psychology*, 89, 845-851.
- Steele, C. M. (1988). The psychology of self-affirmation: Sustaining the integrity of the self. *Advances in Experimental Social Psychology*, 21, 261-302.
- Steele, C. M., Spencer, S. J., & Lynch, M. (1993). Self-image resilience and dissonance: the role of affirmational resources. *Journal of Personality and Social Psychology*, 64, 885-896.
- Stern, B. B., Tewari, S., & Gould, S. J. (1993). Sex-typed service images: An empirical investigation of self-service variables. *Service Industries Journal*, 13, 74-96.
- Stone, J., & Cooper, J. (2003). The effect of self-attribute relevance on how self-esteem moderates attitude change in dissonance processes. *Journal of Experimental Social Psychology*, 39, 508-515.
- Tesser, A. (1988). Toward a self-evaluation maintenance model of social behavior. *Advances in Experimental Social Psychology*, 21, 181-227.
- Tuncay Zayer, L., & Coleman, C. A. (2015). Advertising professionals' perceptions of the impact of gender portrayals on men and women: A question of ethics?. *Journal of Advertising*, 44, 1-12.
- Walzer, M. (2002). Equability and civil society. In S. Chambers & W. Kymlicka (Eds.), *Alternative conceptions of civil society* (pp. 34-49). Princeton, NJ: Princeton University Press.
- Whipple, T. W., & McManamon, M. K. (2002). Implications of using male and female voices in commercials: An exploratory study. *Journal of Advertising*, 31, 79-91.
- Whipple, T. W., & Courtney, A. E. (1980). How to portray women in TV commercials. *Journal of Advertising Research*, 20, 53-59.
- Windels, K. (2016). Stereotypical or just typical: how do US practitioners view the role and function of gender stereotypes in advertisements?. *International Journal of Advertising*, 35, 864-887.
- Wrightsmann, L. S., & Deaux, K. (1981). *Social psychology in the 80s*. Brooks/Cole Publishing Company.

Yogeeswaran, K., & Dasgupta, N. (2014). The devil is in the details: Abstract versus concrete construals of multiculturalism differentially impact intergroup relations. *Journal of Personality and Social Psychology*, 106, 772-789.

Zhao, X., Lynch Jr, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37, 197-206.

Liu, N. G. (2018). Facing “her” Era: The phenomenon and cultural analysis of “female-oriented” in film and television art. *Modern Communication (Journal of Communication University of China)*, 40, 94-98.

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