The Charm of "One" Person Endorsement: How the Number of Brand Endorsers Influences Consumers' Brand Attitude

Authors: Yaxuan Ran, Liu Jiani, Yishi Zhang, Wei Haiying, Zhang Yishi

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Abstract

Some brands invite only one celebrity endorser, whereas others employ multiple celebrities. Which approach proves more effective? To address this question, the present research, grounded in the image transfer perspective and solo positivity bias, investigates the underlying mechanism and boundary conditions through which the number of brand endorsers (one endorser vs. multiple endorsers) influences brand attitude. The findings demonstrate that, compared to multiple brand endorsers, a single brand endorser generates more favorable consumer brand attitudes. This effect is driven by consumers forming a stronger self-brand connection with one (vs. multiple) brand endorser, which subsequently enhances brand attitude. However, this endorser effect is confined to symbolic products; for non-identity-symbolic products, no significant difference emerges between single (vs. multiple) brand endorsers in terms of brand attitude. Furthermore, when multiple brand endorsers constitute a cohesive group, the endorser number effect reverses, such that multiple brand endorsers (vs. a single endorser) exert a stronger influence on brand attitude.

Full Text

The Magic of One: How the Number of Brand Endorsers Affects Consumer Brand Attitude

RAN Yaxuan[1], LIU Jiani[1], ZHANG Yishi[2], WEI Haiying[3]
[1]School of Business Administration, Zhongnan University of Economics and Law, Wuhan 430073, China
[2]School of Management, Wuhan University of Technology, Wuhan 430070, China
[3]School of Management, Jinan University, Guangzhou 510632, China

Abstract

Some brands invite only one celebrity endorser, while others use multiple celebrities simultaneously. Which strategy is more effective? To answer this question, this research investigates the influence of the number of brand endorsers (one vs. multiple) on brand attitude, drawing on the image transference perspective and person-positivity bias. The findings reveal that consumers exhibit more favorable brand attitudes toward single-endorser brands than toward multiple-endorser brands. This effect occurs because consumers develop stronger self-brand connections with single (vs. multiple) endorsers, which subsequently enhances brand attitude. However, this endorser-number effect is limited to identity-signaling products; for non-identity-signaling products, no significant difference emerges between single and multiple endorsers. Furthermore, when multiple endorsers constitute a group, the effect reverses—multiple endorsers (vs. a single endorser) yield higher brand attitudes.

Keywords: brand endorsement; number of people; self-brand connection; image transference perspective; person-positivity bias

1. Problem Statement

"*A successful brand endorsement should facilitate communication not only between the product and the endorser, but also between the endorser and the consumer.*"
–Kevin Plank, Founder of Under Armour

Celebrity endorsement represents a "cost-effective" brand communication strategy (Elberse & Verleun, 2012). Many companies invest heavily in celebrity endorsements, with endorser fees sometimes exceeding half of their marketing budgets. In contemporary practice, brands increasingly adopt strategies featuring two or more celebrities simultaneously—known as multiple celebrity endorsers—to enhance influence and expand consumer reach. For instance, Rolex once had as many as 42 endorsers, and PepsiCo featured six celebrities including Jolin Tsai in its 2004 campaign. Conversely, Coca-Cola abandoned its all-star endorsement lineup in 2014, selecting only Kim Soo-hyun as its sole spokesperson. This raises a critical question: Is one endorser or multiple endorsers more effective?

Despite the prevalence of multiple-celebrity endorsement, academic research has devoted insufficient attention to this phenomenon. To date, brand endorsement research has primarily focused on single-celebrity scenarios, examining either one celebrity endorsing one brand or one celebrity endorsing multiple brands. Under the single-celebrity, single-brand paradigm, scholars have investigated how endorser characteristics (Huang, Yao, & Liu, 2018), image congruence between endorser and brand (van der Veen & Song, 2014), endorser-consumer matching (Choi & Rifon, 2012), and consumer characteristics (Petty, Cacioppo,

& Schumann, 1983) influence consumer responses. Recent work has begun exploring the effectiveness and spillover effects of one celebrity endorsing multiple brands (Chen, Chang, Besherat, & Baack, 2013). In stark contrast to this rich body of single-celebrity research, only a handful of studies have examined multiple-celebrity endorsement (Rice, Kelting, & Lutz, 2012; Thomas & Fowler, 2015; Handriana & Wisandiko, 2017), creating a significant gap relative to its common practice. Moreover, existing findings on endorsement number effects remain inconsistent. How does the number of brand endorsers influence consumer brand attitude? What are the underlying mechanisms? These important questions remain unanswered. This research addresses these gaps by investigating the mechanisms and boundary conditions through which the number of brand endorsers affects consumer brand attitude.

1.1 Number of Brand Endorsers

A brand endorser is defined as "a person who makes statements or demonstrates behaviors that represent brand image and characteristics in brand communication activities" (Elberse & Verleun, 2012), serving as a critical vehicle for consumers to establish relationships with brands (Ilicic & Webster, 2013). Regarding how to select appropriate brand endorsers, two dominant perspectives have emerged: the Match-Up Hypothesis and the Source Attractiveness Model. The former emphasizes congruence between endorser and brand image (Lafferty, Goldsmith, & Newell, 2002), while the latter focuses on endorser attractiveness factors (Ilicic & Webster, 2013). However, these perspectives are constrained by the implicit assumption of "one endorser," rendering them unable to address how the number of endorsers (one vs. multiple) specifically influences endorsement effectiveness.

Furthermore, existing research on multiple-celebrity endorsement has inadequately examined this factor. First, the direct effect of endorsement number on brand attitude and its internal mechanism remain a black box. For example, Rice et al. (2012) analyzed the combined effects of endorsement number, image consistency, and involvement, while Saleem (2007) and Handriana and Wisandiko (2017) simultaneously manipulated endorsement number and involvement, yet none tested the direct impact mechanism of endorsement number. Second, prior research has primarily adopted an information repetition perspective, suggesting that multiple endorsers provide redundant information compared to a single endorser. This perspective not only contradicts the reality of advertisement repetition (regardless of endorser number) but also overlooks critical differences in how people perceive individuals versus groups. Extensive psychological research confirms that number (one vs. multiple) systematically influences impression formation speed (Hamilton & Sherman, 1996; Susskind, Maurer, Thakkar, Hamilton, & Sherman, 1999), sharing intentions (Barasch & Berger, 2014), and interpersonal attitudes (Small, Loewenstein, & Slovic, 2007). Regarding whether one or multiple endorsers is superior, existing findings are contradictory. Some studies suggest that multiple endorsers outperform sin-

gle endorsers when consumer involvement is low. For instance, Handriana and Wisandiko (2017) and Saleem (2007) found that under low involvement (i.e., product unfamiliarity), multiple endorsers generate more positive ad evaluations than single endorsers, with no significant difference under high involvement. Similarly, Rice, Kelting, and Lutz (2012) found that multiple endorsers yield higher ad evaluations only when consumer involvement is low. Conversely, Thomas and Fowler (2015) found that for low-involvement products, single endorsers actually produce more positive ad evaluations than multiple endorsers. This research builds upon the "one vs. multiple" literature to deeply investigate the effectiveness of endorsement number and dissect its influence mechanisms on consumer brand attitude.

1.2 Number of Brand Endorsers and Brand Attitude

Brand endorsement contexts create strong associations between brands and endorsers. From the image transference perspective, consumers automatically form associative networks linking brand characteristics with endorser characteristics. On one hand, consumers evaluate endorser traits based on brand cues; for example, when a brand commits a transgression, its endorser is perceived as less credible (Louie & Obermiller, 2002). On the other hand, consumers infer brand characteristics from endorser traits; for instance, an older endorser makes a brand appear more "historic" (Huber, Meyer, Vogel, Weihrauch, & Hamprecht, 2013). Thus, brand and endorser characteristics can transfer and influence each other. In endorsement contexts, celebrity image naturally transfers to the brand (Miller & Allen, 2012). Regarding endorsement number, when a brand is endorsed by one person, consumers perceive the brand as possessing "one-person" traits, whereas multiple endorsers lead consumers to perceive "multiple-person" traits.

What perceptual differences exist between one-person and multiple-person traits? Person-positivity bias offers a classic explanation for psychological differences when facing "one vs. multiple," positing that individuals evaluate a single person more positively than multiple people (Sears, 1983). Sears (1983), the originator of person-positivity bias theory, argued that "personhood" is key to differential reactions toward one or multiple objects. Personhood, a philosophical concept describing the existential state of being an individual, suggests that groups of multiple people are often viewed as abstract entities whose existence more closely resembles objects than persons. Consequently, a single person possesses high personhood while multiple people possess low personhood. Research on moral behavior supports this view: Critcher and Dunning (2013) found that people infer multiple individuals' moral behavior as norm- or pressure-driven, whereas a single person' s moral behavior stems from self-awareness, indicating that a single person is perceived as more autonomous and closer to a "personal existence" state. Differences in personhood degree thus lead to attitudinal differences. Compared to low-personhood "it" (e.g., objects or organizations), people evaluate high-personhood "he/she" (e.g.,

concrete individuals) more positively, perceive them as more similar and closer, and are more likely to adopt heuristic processing (Sears, 1983; Iyengar et al., 2013; Critcher & Dunning, 2014). For example, in consumer-salesperson interactions, salespeople using high-personhood singular pronouns ("I") generate higher customer satisfaction and repurchase intentions than those using low-personhood plural pronouns ("we") (Packard, Moore, & McFerran, 2018). Based on these findings—(1) endorser number symbolizes personhood that transfers to the brand, and (2) one person possesses higher personhood than multiple people—we propose that single-celebrity endorsement enhances consumer brand attitude more effectively than multiple-celebrity endorsement.

Hypothesis 1: Compared to multiple-celebrity endorsement, single-celebrity endorsement yields higher consumer brand attitude.

The key function of brand endorsers is to express brand identity, thereby facilitating consumers' relationships with brands—namely, self-brand connection (Park, MacInnis, Priester, Eisingerich, & Iacobucci, 2010; Escalas, 2004). We propose that self-brand connection serves as the critical mechanism explaining the relationship between endorsement number and brand attitude, with consumers forming stronger self-brand connections with single (vs. multiple) endorsers. First, brands representing "one person"are perceived as more stable and unique than those representing "multiple people,"making them easier to connect with. Research shows that individuals more readily form relationships with one person than with multiple people (Willis & Todorov, 2006; Susskind, Maurer, Thakkar, Hamilton, & Sherman, 1999), find it easier to communicate with one person (Barasch & Berger, 2014), and are even more likely to forgive one person (vs. multiple people) (Newheiser, Sawaoka, & Dovidio, 2012). As Kevin Plank noted, "successful brand endorsement···should facilitate communication between the endorser and ordinary consumers," and one endorser bridges this communication more effectively than multiple endorsers. Second, because "one person" exhibits greater personhood and people prefer to establish intimate connections with high-personhood objects (Iyengar et al., 2013), consumers develop stronger connections with single-endorser brands. Anthropomorphism research similarly demonstrates that consumers form closer relationships with anthropomorphized brands (Zhou, Kim, & Wang, 2019), which enhances personhood. Therefore, single-endorser brands (vs. multiple-endorser brands) strengthen consumers' self-brand connections.

Self-brand connection reflects the extent to which consumers incorporate brands into their self-concept (Escalas, 2004) and positively influences brand attitudes. Extensive brand research has shown that self-brand connection evokes positive emotions, enhances brand identification (Park et al., 2010), and even provides protective mechanisms when brands commit transgressions (Cheng, White, & Chaplin, 2012). We therefore contend that self-brand connection mediates the effect of endorsement number on brand attitude, with consumers developing stronger self-brand connections with single (vs. multiple) endorsers, subsequently generating more positive attitudes toward single-endorser brands.

Hypothesis 2: Self-brand connection mediates the effect of endorsement number (one vs. multiple) on consumer brand attitude.

The logic underlying the endorsement number effect depends on (1) consumers transferring perceived endorser traits to brand characteristics and (2) consumers' tendency to form emotional connections with brands symbolizing a "one-person" identity. We argue that Hypotheses 1 and 2 hold only for identity-signaling products—products that carry identity-representation meaning (Otterbring, Ringler, Sirianni, & Gustagsson, 2018). First, identity-signaling products strengthen associations between endorsers and brands (Otterbring et al., 2018; Gao, Winterich, & Zhang, 2016), making consumers more likely to infer brand characteristics based on endorser number cues (i.e., relying on the image transference path to form brand attitudes). Second, identity-signaling products possess exclusivity, superiority, and uniqueness attributes (Halevy, Chou, Cohen, & Livingston, 2011), leading consumers to more readily incorporate them into their self-concept and establish self-brand connections (Park et al., 2010). Accordingly, we propose that the advantage of single-celebrity endorsement (vs. multiple-celebrity endorsement) exists only for identity-signaling products. For non-identity-signaling products, consumers do not or only minimally connect with brands through endorsers, weakening the effect of endorsement number on self-brand connection.

Hypothesis 3: Product type (identity-signaling vs. non-identity-signaling) moderates the effect of endorsement number on self-brand connection. Specifically, for non-identity-signaling products, the effect of endorsement number (single vs. multiple) on self-brand connection will be attenuated.

1.3 Boundary Conditions

When might multiple-celebrity endorsement outperform single-celebrity endorsement? We propose that when multiple endorsers constitute (or are described as) a group, multiple-celebrity endorsement generates higher brand attitudes than single-celebrity endorsement. According to Gestalt theory, people tend to perceive components of a scene as a unified whole (Köhler, 1970), facilitating faster and more positive processing. In marketing contexts, consumers similarly process brand and product information based on Gestalt principles (Park, Jaworski, & MacInnis, 1986; Cunha, Forehand, & Angle, 2015). When external cues indicate that multiple endorsers form an inseparable group, Gestalt processing leads consumers to perceive multiple endorsers as "one" whole, treating them as a single object with complete personhood (Weaver, Garcia, & Schwarz, 2012). From the image transference perspective, consumers infer that brands endorsed by such "one" group possess "one-person" traits, making group-type multiple endorsement similar to single endorsement.

Although both group-type multiple endorsement and single endorsement symbolize a "one" brand identity, group-type multiple endorsement more strongly emphasizes wholeness and inseparability cues, which can enhance the endorsers'

personhood. Research on bias for the whole indicates that consumers strive to maintain completeness and find it difficult to tolerate its violation (Mishra, Mishra, & Nayakankuppam, 2006). Compared to defective objects, complete objects exhibit higher anthropomorphism (White, Lin, Dahl, & Ritchie, 2016). When a single object is viewed as incomplete, people often express more positive attitudes toward multiple objects that convey completeness. This phenomenon also manifests in product assortments: when multiple products are perceived as a complete whole, the assortment (vs. a single product) enhances consumer preference (Shaddy & Fishbach, 2016; Evers, Inbar, & Zeelenberg, 2014), a phenomenon known as the set-fit effect. Consequently, because (1) group-type multiple endorsement and single endorsement both reflect a brand' s "one" identity, and (2) group-type multiple endorsement possesses higher personhood than single endorsement, group-type multiple endorsement strengthens self-brand connections and enhances brand attitudes more effectively than both single endorsement and non-group multiple endorsement.

Hypothesis 4: When multiple brand endorsers constitute a group, consumers exhibit higher brand attitudes toward multiple-celebrity endorsement than toward single-celebrity endorsement.

1.4 Current Research

This research first conducted a pilot study to verify the prerequisite assumption that when a brand is endorsed by one person, consumers perceive the brand as possessing "one-person" traits, whereas multiple endorsers lead to perceptions of "multiple-person" traits. Subsequently, four experiments were conducted to test the hypotheses. Experiment 1 examined the main effect of endorsement number on brand attitude and the mediating role of self-brand connection. Experiment 2 measured participants' pre-existing self-brand connection and employed a moderation-of-process approach (Spencer, Zanna, & Fong, 2005) to revalidate the self-brand connection mechanism. Experiment 3 tested the boundary condition of endorsement number effects. Experiment 4 validated the boundary condition of group-type multiple celebrity endorsement.

2. Pilot Study

2.1 Design and Procedure

The pilot study aimed to verify the fundamental assumption that endorsement number influences consumers' inferences about brand characteristics. The experiment employed a within-subjects design with four conditions: apparel [five endorsers], cosmetics [two endorsers], jewelry [single endorser], and watch [single endorser]. To avoid pre-existing brand knowledge, all four brands were fictitious: apparel brand TP Shop, cosmetics brand Caring More, jewelry brand J. Estina, and watch brand TeWise.

Fifty-three undergraduate students (Mage = 20.32 years, SD = 1.25) participated. Participants were first informed, "Below is the latest promotional photo

for apparel brand TP Shop," and viewed a promotional photo featuring five endorsers. They then rated "TP Shop' s brand style is very consistent," "TP Shop' s brand style is very diverse," "TP Shop can suit a certain type of person," and "TP Shop can suit many different people" (1 = "strongly disagree," 7 = "strongly agree"), and evaluated "If TP Shop had a personality, it would be" (1 = "can represent one person' s identity traits," 7 = "can represent multiple people' s identity traits"). To exclude brand and endorser effects, participants also rated endorser familiarity and brand familiarity (1 = "very unfamiliar," 7 = "very familiar"). As a within-subjects design, participants subsequently evaluated cosmetics brand Caring More, jewelry brand J. Estina, and watch brand TeWise using identical procedures and measures. Finally, participants reported demographic information and guessed the experimental purpose.

2.3 Results

No participants guessed the experimental purpose. Descriptive statistics are presented in Table 1 . Paired-samples t-tests compared scores for style consistency vs. diversity and suitability for one type vs. many types of people. Results showed that for multiple-endorser brands, participants perceived greater style diversity (TP Shop: $t(52) = 4.09$, $p < 0.001$; Caring More: $t(52) = 11.90$, $p < 0.001$) and suitability for different people (TP Shop: $t(52) = 6.84$, $p < 0.001$; Caring More: $t(52) = 2.30$, $p = 0.026$). Conversely, single-endorser brands were perceived as having more consistent style (J. Estina: $t(52) = 4.12$, $p < 0.001$; TeWise: $t(52) = 5.56$, $p < 0.001$) and suitability for a certain type of person (J. Estina: $t(52) = 10.99$, $p < 0.001$; TeWise: $t(52) = 10.38$, $p < 0.001$). One-sample t-tests using "4" as the test value indicated that multiple-endorser brands were perceived as representing multiple people' s identity traits (TP Shop: $t(52) = 5.80$, $p < 0.001$; Caring More: $t(52) = 10.27$, $p < 0.001$), while single-endorser brands were perceived as representing one person' s identity traits (J. Estina: $t(52) = -2.78$, $p = 0.008$; TeWise: $t(52) = -8.69$, $p < 0.001$). These results remained unchanged when brand familiarity and endorser familiarity were included as covariates. Thus, the pilot study supports the image transference perspective: when a brand is endorsed by one (multiple) person(s), it is perceived as possessing "one-person" ("multiple-person") identity traits.

3. Experiment 1

3.1 Design

Experiment 1 tested the main effect of endorsement number on brand attitude (Hypothesis 1) and the mediating role of self-brand connection (Hypothesis 2). To address limitations in previous research designs, Experiment 1 incorporated two key improvements: First, to avoid the mere exposure effects present in Rice et al. (2012) and Thomas and Fowler (2015), the multiple-endorser condition featured three endorsers appearing simultaneously in one advertisement. Second, because Handriana and Wisandiko (2017) selected only one endorser from a multiple-endorser set for their single-endorser condition—making it difficult

to rule out specific endorser effects—Experiment 1 created three single-endorser groups, each featuring a different endorser from the multiple-endorser set.

The experiment employed a single-factor between-subjects design with four levels (endorsement number: Person A vs. Person B vs. Person C vs. three persons), where the single-endorser conditions featured one female endorser (A, B, or C) and the multiple-endorser condition featured three female endorsers. To control for confounding variables such as pre-existing consumer-firm relationships, firm familiarity, and endorser gender, the study used a fictitious female apparel company "Classy Katti" and fictitious endorser photos (see Figure 1 [Figure 1: see original paper]) containing the company logo and name. To ensure participants had some initial purchase likelihood and because the fictitious company sold women' s apparel, only female participants were recruited. Two hundred ten university students participated, with two male participants excluded, leaving 208 female participants. Using G*Power 3.1 (Faul, Erdfelder, Buchner, & Lang, 2009) to calculate statistical power for a one-way ANOVA with four groups, an effect size (f) of 0.4, and alpha = 0.05, the sample of 208 yielded a power of 0.99, exceeding the conventional threshold of 0.80.

3.2 Pretest

A classroom-based pretest with 94 undergraduate students (Mage = 20.97 years, SD = 1.04) employed a within-subjects design with three conditions (Endorser A vs. B vs. C) to verify that participants evaluated the endorsers differently from ordinary people. Participants viewed photos of each endorser and rated "Assuming your liking for an ordinary person is 0, your liking for the person in the photo is" (-3 = "dislike very much," 0 = "no difference from ordinary person," 3 = "like very much") and "Your familiarity with the person in the photo is" (1 = "very unfamiliar," 7 = "very familiar"), followed by age and gender reporting.

One-sample t-tests using 0 as the test value revealed that participants liked Endorser A ($M = 1.65$, $SD = 1.09$; $t(93) = 14.74$, $p < 0.001$), Endorser B ($M = 1.47$, $SD = 0.95$; $t(93) = 15.03$, $p < 0.001$), and Endorser C ($M = 1.62$, $SD = 1.31$; $t(93) = 11.95$, $p < 0.001$) significantly more than ordinary people. A series of paired t-tests indicated no significant differences in liking or familiarity among the three endorsers ($ts < 1.43$, $ps > 0.16$).

3.3 Procedure

Participants were randomly assigned to one of four conditions. To conceal the true purpose, the questionnaire was introduced as a "women' s apparel advertising market survey." Participants first read an introduction to Classy Katti: "Founded in 1995, Classy Katti specializes in high-quality international fashion collections for women, including elegant urban wear and casual attire." They then viewed Classy Katti' s summer promotional photo and reported brand attitude (1 = "very bad/very dislike/very negative," 7 = "very good/very like/very

positive" ; = 0.94), brand choice ("If I needed to purchase women' s clothing, I would choose Classy Katti" : 1 = choose, 2 = reject, 3 = uncertain), and self-brand connection (1 = "I feel very distant from Classy Katti/Classy Katti is very distant from me," 7 = "I feel very close to Classy Katti/Classy Katti is very close to me" ; r = 0.85, p < 0.001; Park, Eisingerich, & Park, 2013). To rule out potential endorser and brand effects, participants rated Classy Katti' s familiarity (1 = "very unfamiliar," 7 = "very familiar") and fame (1 = "very unknown," 7 = "very well-known"), endorser liking (1 = "dislike very much," 7 = "like very much") and fame (1 = "very unknown," 7 = "very well-known"), and endorser-brand image match (1 = "very mismatched," 7 = "very matched").

3.4 Results

Manipulation Check. No participants guessed the experimental purpose. After excluding seven participants who failed attention checks, 201 valid responses remained (Mage = 22.67 years, SD = 2.77). As a manipulation check for endorsement number, 96.42% (54/56) of participants in the three-person condition correctly recalled the number, compared to 97.24% (141/145) in the single-person conditions, with no significant difference in recall accuracy between groups ($^2(1)$ = 0.09, p = 0.761). This indicates successful manipulation and equivalent involvement across conditions.

Main Effect. A one-way ANOVA on brand attitude revealed a significant main effect of endorsement number (F(3, 197) = 3.39, p = 0.019, p^2 = 0.05). The three-person condition (M = 4.49, SD = 1.53) yielded significantly lower brand attitude than the single-person A condition (M = 5.09, SD = 1.13; F(1, 197) = 5.08, p = 0.026, p^2 = 0.05), single-person B condition (M = 5.11, SD = 1.17; F(1, 197) = 5.00, p = 0.028, p^2 = 0.05), and single-person C condition (M = 5.21, SD = 1.25; F(1, 197) = 6.63, p = 0.011, p^2 = 0.06), with no significant differences among the three single-endorser conditions (Fs < 0.26, ps > 0.607). This supports Hypothesis 1, showing that single-celebrity endorsement produces more favorable brand attitudes than multiple-celebrity endorsement.

For brand choice (1 = choose, 2 = reject, 3 = uncertain), the distribution differed significantly between single-endorser (61.38% choose, 11.72% reject, 26.90% uncertain) and three-person conditions (42.86% choose, 12.5% reject, 44.64% uncertain; $^2(2)$ = 6.48, p = 0.039). Recoding brand choice as a quasi-continuous variable (3 = choose, 2 = uncertain, 1 = reject), an independent-samples t-test showed marginally higher scores in the single-endorser condition (t(199) = 1.77, p = 0.079), providing additional support for Hypothesis 1.

Mediation Analysis. Using Preacher and Hayes' s (2008) mediation model (Model 4, 1000 bootstrap resamples), we tested Hypothesis 2 regarding self-brand connection as a mediator. Endorsement number was dummy-coded (-1 = three persons, 1 = one person). Results showed a significant indirect effect of self-brand connection on the relationship between endorsement number and

brand attitude (indirect effect = 0.26, SE = 0.08, 95% CI: [0.1034, 0.4179]), supporting Hypothesis 2 (see Figure 2 [Figure 2: see original paper]).

Control Variables. No significant differences emerged across the four conditions in brand familiarity, brand fame, endorser liking, or endorser fame (Fs < 1.44, ps > 0.231). Perceived endorser-brand match also did not differ ($F(3, 197) = 0.33$, $p = 0.804$, $p^2 = 0.01$). Including these five variables as covariates did not alter the main effect results ($F(3, 192) = 8.21$, $p < 0.001$, $p^2 = 0.11$).

Summary. Experiment 1 validated Hypotheses 1 and 2, demonstrating that single-celebrity endorsement generates stronger self-brand connections and consequently more favorable brand attitudes than multiple-celebrity endorsement. However, limitations remain: (1) endorsers and participants were exclusively female, and (2) while we controlled for individual endorser differences, we did not eliminate potential effects of perceived diversity from multiple endorsers. Experiment 2 addresses these limitations while further validating the self-brand connection mechanism through manipulation of pre-existing self-brand connection.

4. Experiment 2

Experiment 2 aimed to revalidate the mediating role of self-brand connection using a moderation-of-process approach by measuring participants' pre-existing self-brand connection and eliminating alternative explanations. Design improvements included: (1) using multiple endorsers appearing in different advertisements rather than simultaneously, (2) including both male and female endorsers (see Figure 3 [Figure 3: see original paper]), (3) recruiting both male and female participants, (4) presenting the same single-endorser advertisement four times in single-endorser conditions and four different endorser advertisements in the multiple-endorser condition to counteract repetition effects, and (5) using the real brand Baume & Mercier. Thus, Experiment 2 employed a single-factor between-subjects design with five levels (endorsement number: single female A vs. single female B vs. single male A vs. single male B vs. four persons). Two hundred forty-nine undergraduate students participated. Using G*Power 3.1 for a one-way ANOVA with five groups, an effect size (f) of 0.4, and alpha = 0.05, the sample of 249 yielded a power of 0.99.

4.2 Procedure

Participants were told they would participate in a "watch advertising evaluation survey" and were randomly assigned to one of five conditions with the procedure illustrated in Figure 4 [Figure 4: see original paper]. All participants first read a Baume & Mercier brand introduction displayed for 10 seconds, followed by product promotional photos. In the four single-endorser conditions, participants viewed four identical advertisements; in the four-person condition, they viewed four different advertisements. Each advertisement was displayed for 3 seconds with 1-second intervals and text prompts indicating continuation. Participants

then rated brand attitude (= 0.92) and pre-existing self-brand connection using Aron et al.' s (1992) Inclusion of Other in the Self scale, which reflects the "meness in the brand" (Park et al., 2013). They also reported endorser recognition (name recall if recognized), endorser familiarity (1 = "very unfamiliar," 7 = "very familiar"), perceived product variety (1 = "very limited," 7 = "very diverse"), and perceived quality (1 = "very poor," 7 = "very good"). Finally, participants reported demographics and guessed the experimental purpose.

4.3 Results

Main Effect. No participants guessed the direct purpose. After excluding four participants who failed attention checks, 245 valid responses remained (62% female; Mage = 21.29 years, SD = 2.61). A one-way ANOVA on brand attitude revealed a significant main effect of endorsement number ($F(4, 240) = 3.54$, $p = 0.008$, $p^2 = 0.06$). Compared to the four-person condition ($M = 3.95$, $SD = 1.57$), brand attitudes were significantly higher for single female A ($M = 4.96$, $SD = 1.00$; $F(1, 240) = 13.45$, $p < 0.001$, $p^2 = 0.13$), single female B ($M = 4.67$, $SD = 1.47$; $F(1, 240) = 5.33$, $p = 0.023$, $p^2 = 0.05$), single male A ($M = 4.56$, $SD = 1.09$; $F(1, 240) = 4.86$, $p = 0.030$, $p^2 = 0.05$), and single male B ($M = 4.80$, $SD = 1.67$; $F(1, 240) = 6.81$, $p = 0.010$, $p^2 = 0.07$).

Moderation Analysis. To test the moderating effect of pre-existing self-brand connection, endorsement number was dummy-coded (single endorsement = 1, four-person endorsement = 2). A regression analysis on brand attitude with endorsement number, pre-existing self-brand connection, and their interaction revealed a significant model ($R^2 = 0.19$, $F(3, 241) = 18.94$, $p < 0.001$), with significant effects for endorsement number (= -2.52, t = -5.52, $p < 0.001$), pre-existing self-brand connection (= -0.40, t = -2.69, $p = 0.008$), and their interaction (= 0.52, t = 4.45, $p < 0.001$; see Figure 5 [Figure 5: see original paper]). Simple slope analysis examined endorsement number effects at high ($M = 5.44$) and low ($M = 1.84$) levels of pre-existing self-brand connection. For high pre-existing self-brand connection, no significant difference emerged between single and four-person endorsement (= 0.28, t = 0.26, $p = 0.798$). For low pre-existing self-brand connection, single endorsement generated higher brand attitude than four-person endorsement (= -1.57, t = -2.31, $p = 0.022$). These results demonstrate that the endorsement number effect occurs only when consumers have low pre-existing emotional connections with the brand.

Alternative Explanations and Controls. Endorsement number showed no significant main effect on perceived quality ($F(1, 240) = 1.06$, $p = 0.376$, $p^2 = 0.02$) but a marginally significant effect on perceived product variety ($F(1, 240) = 2.18$, $p = 0.072$, $p^2 = 0.04$), with the four-person condition perceived as more varied than the single-endorser conditions ($Fs > 2.81$, $p < 0.097$). However, perceived variety did not mediate the effect of endorsement number (1 = single, 2 = multiple) on brand attitude (indirect effect = -0.02, SE = 0.06, 95% CI: [-0.0278, 0.2926]). Including perceived variety as a covariate did not change the results ($F(4, 239) = 4.44$, $p = 0.002$, $p^2 = 0.07$). No significant differences

in endorser familiarity emerged across conditions, and endorser gender did not affect brand attitude ($t(198) = 0.63$, $p = 0.532$), nor did the interaction between participant gender and endorser gender ($F(1, 196) = 0.70$, $p = 0.404$).

Summary. Experiment 2 addressed design limitations from Experiment 1 and further confirmed the critical role of self-brand connection in the endorsement number effect. By measuring pre-existing self-brand connection, the moderation analysis showed that the endorsement number effect disappears when pre-existing self-brand connection is high, providing additional evidence for self-brand connection as the explanatory mechanism.

5. Experiment 3

Experiment 3 examined the prerequisite condition for the endorsement number effect—that single endorsement outperforms multiple endorsement only for identity-signaling products. Using real brand BiSu Automobile and real endorsers (single: Huang Xiaoming; multiple: Huang Xiaoming, Xu Wei, Jike Junyi), the experiment manipulated product type through advertising slogans: identity-signaling ("Supreme travel, only BiSu") vs. non-identity-signaling ("Casual travel, only BiSu"). Experimental materials are shown in Figure 6 [Figure 6: see original paper]. The study employed a 2 (endorsement number: single vs. multiple) × 2 (product type: identity-signaling vs. non-identity-signaling) between-subjects factorial design. One hundred sixty-one undergraduate students participated. Using G*Power 3.1 for a two-way ANOVA with four groups, df = 1, effect size (f) = 0.25, and alpha = 0.05, the sample of 161 yielded a power of 0.88.

5.2 Procedure

Participants were randomly assigned to one of four conditions, viewed a BiSu automobile advertisement, and then rated brand attitude (= 0.91) and self-brand connection ($r = 0.57$, $p < 0.001$) using measures identical to Experiment 1. To verify the manipulation, participants rated perceived identity signaling ("BiSu automobile can symbolize consumer identity"; 1 = "strongly disagree,"7 = "strongly agree"). To control for preferences toward real brands and endorsers, we measured brand familiarity (1 = "very unfamiliar," 7 = "very familiar") and endorser liking (1 = "dislike very much," 7 = "like very much"). Finally, participants reported demographics and guessed the experimental purpose.

5.3 Results

Manipulation Check. No participants guessed the purpose. Three participants who failed attention checks were excluded, leaving 158 valid responses (58.22% female; Mage = 20.91 years, SD = 3.40). A t-test on identity signaling perception revealed that the "Supreme travel" ad ($M = 4.54$, $SD = 1.28$) was perceived as more identity-signaling than the "Casual travel" ad ($M = 3.71$, $SD = 0.96$; $t(156) = 4.61$, $p < 0.001$). A 2 × 2 ANOVA on identity signaling showed

only a significant main effect of product type ($F(1, 154) = 21.06$, $p < 0.001$, $p^2 = 0.12$), with no effects of endorsement number ($F(1, 154) < 1$, $p = 0.57$) or the interaction ($F(1, 154) < 1$, $p = 0.68$), confirming that the independent variable did not influence the moderator.

Main Effect. A 2 × 2 ANOVA on brand attitude revealed significant main effects of endorsement number ($F(1, 154) = 5.99$, $p = 0.016$, $p^2 = 0.04$) and the interaction ($F(1, 154) = 4.24$, $p = 0.041$, $p^2 = 0.03$), with no main effect of product type ($F(1, 154) < 1$, $p = 0.55$). Follow-up contrasts showed that for identity-signaling ads, single endorsement generated higher brand attitude than three-person endorsement (M_identity-single = 4.65, SD = 1.07 vs. M_identity-three = 3.88, SD = 1.24; $F(1, 154) = 8.72$, $p = 0.004$, $p^2 = 0.10$). For non-identity-signaling ads, no significant difference emerged between single and three-person endorsement (M_non-identity-single = 4.40, SD = 0.84 vs. M_non-identity-three = 4.33, SD = 1.13; $F(1, 154) < 1$, $p = 0.77$).

Mediation Analysis. With endorsement number (0 = single, 1 = multiple) and product type (0 = non-identity-signaling, 1 = identity-signaling) as dummy variables, a moderated mediation analysis (Model 8, 1000 bootstrap resamples; Preacher & Hayes, 2008) revealed a significant indirect effect through self-brand connection (indirect effect = -0.57, SE = 0.29, 95% CI: [-1.1519, -0.0459]). For non-identity-signaling products, the mediation was non-significant (indirect effect = 0.03, SE = 0.18, 95% CI: [-0.3643, 0.3360]), whereas for identity-signaling products, the mediation was significant (indirect effect = -0.55, SE = 0.23, 95% CI: [-0.9845, -0.1223]). This indicates that identity-signaling products enable consumers to form emotional connections with products, which is the foundational condition for endorsement number effects.

Finally, the 2 × 2 ANOVA revealed no effects on brand familiarity or endorser liking ($Fs < 1.30$, $ps > 0.26$). Including these variables as covariates did not change the results for brand attitude (endorsement number main effect: $F(1, 152) = 6.28$, $p = 0.013$, $p^2 = 0.04$; interaction: $F(1, 152) = 4.25$, $p = 0.041$, $p^2 = 0.03$).

Summary. Experiment 3 established the boundary condition that single endorsers outperform multiple endorsers only for identity-signaling products. Consumers more readily form emotional connections with identity-signaling products, making the enhanced self-brand connection from single (vs. multiple) endorsement more pronounced and impactful on brand attitude, thereby validating Hypothesis 3 and providing further evidence for the self-brand connection mechanism.

6. Experiment 4

Experiment 4 had two objectives: (1) to test the role of group characteristics among multiple endorsers in the endorsement number effect, and (2) to replicate findings using textual rather than pictorial endorser presentations. The study employed a single-factor between-subjects design with three levels (endorsement:

single vs. group-type multiple vs. non-group-type multiple). One hundred three undergraduate students participated. Using G*Power 3.1 for a one-way ANOVA with three groups, effect size (f) = 0.4, and alpha = 0.05, a sample of 102 (the nearest multiple of 3 to 103) yields a power of 0.95.

6.2 Procedure

Participants were randomly assigned to three conditions and first viewed a Hualu shampoo product advertisement. They then received information about brand endorsers. Both the single-endorsement and group-type multiple-endorsement conditions read: "HERO is an emerging rap group consisting of Hara, Edd, Rebecca, and Osborn, who won the 2018 Newcomer Group Award with their hit song 'YES.' " The single-endorsement condition then learned: "Recently, Hualu shampoo invited Hara from HERO to serve as its brand endorser." The group-type multiple-endorsement condition learned: "Recently, Hualu shampoo invited the HERO group to serve as its brand endorser." The non-group-type multiple-endorsement condition read: "Hara, Edd, Rebecca, and Osborn are four emerging rap singers, each nominated for the 2018 Newcomer Award. Recently, Hualu shampoo invited all four to serve as brand endorsers."

Participants then rated brand attitude (= 0.93) and self-brand connection (r = 0.85, p < 0.001) using measures identical to Experiment 1. To assess groupness, only the two multiple-endorsement conditions rated perceived groupness (1 = "does not look like a group at all,"7 = "looks very much like a group"). To rule out averaging effects, we measured perceived endorser fame (1 = "very unknown," 7 = "very well-known"). Finally, participants reported demographics and guessed the experimental purpose.

6.3 Results

Manipulation Check. One participant mentioned the experiment might relate to endorser group information, seven failed attention checks, and two had missing data (including one who refused to report gender), leaving 93 valid responses (46.24% female; Mage = 19.59 years, SD = 4.80). A one-way ANOVA on perceived groupness showed that describing HERO as "an emerging rap group" made the four endorsers appear more group-like (M_group = 4.55, SD = 1.41 vs. M_non-group = 2.47, SD = 1.20; F(1, 59) = 38.54, p < 0.001, p^2 = 0.40), confirming successful manipulation.

Main Effect. A one-way ANOVA on brand attitude revealed a significant main effect (F(2, 90) = 12.54, p < 0.001, p^2 = 0.22). Group-type multiple endorsement (M = 5.58, SD = 0.91) generated higher brand attitude than both single endorsement (M = 4.85, SD = 1.15; F(1, 90) = 7.71, p < 0.01, p^2 = 0.11) and non-group-type multiple endorsement (M = 4.06, SD = 1.46; F(1, 90) = 24.14, p < 0.001, p^2 = 0.29), with single endorsement also outperforming non-group-type multiple endorsement (F(1, 90) = 5.80, p = 0.019, p^2 = 0.09).

Mediation Analysis. With three-level categorical independent variables, we

used group-type multiple endorsement as the reference group (coded 0) and created dummy variables for single endorsement and non-group-type multiple endorsement. Hayes and Preacher' s (2014) mediation model (Model 4, 5000 bootstrap resamples) revealed significant indirect effects through self-brand connection for both comparisons (group-type multiple vs. single: indirect effect = -0.65, SE = 0.22, 95% CI: [-1.1203, -0.2546]; group-type multiple vs. non-group: indirect effect = -0.80, SE = 0.24, 95% CI: [-1.2915, -0.3615]), further confirming self-brand connection as the mediator. Perceived overall endorser fame did not differ across conditions ($F(2, 90) = 1.53$, $p = 0.22$) and did not alter the results.

Summary. Experiment 4 replicated findings using textual descriptions and identified a reversal of the endorsement number effect: when multiple endorsers constitute a group, multiple endorsement outperforms single endorsement, validating Hypothesis 4. This occurs because people strive to protect group completeness; when completeness is violated (e.g., one member endorsing alone), evaluations become more negative.

7. General Discussion

This research examined how the number of brand endorsers (one vs. multiple) influences consumer brand attitude, its psychological mechanisms, and boundary conditions. Four sequential experiments, varying corporate contexts, multiple-ad formats, endorser presentation modes, endorser gender, and participant gender, revealed robust endorsement number effects. The findings show that single-celebrity endorsement generates more favorable consumer brand attitudes than multiple-celebrity endorsement, with self-brand connection as the primary mechanism. This effect is limited to identity-signaling products, and multiple endorsers' group characteristics can reverse the main effect. These conclusions enrich theoretical literature and provide practical guidance for marketing endorsement strategies.

7.1 Theoretical Contributions

First, this research advances brand endorsement literature and expands the scope of number-of-people research by focusing on endorsement number (single vs. multiple). While existing brand endorsement research has concentrated on single-celebrity contexts (Bartz, Molchanov, & Stork, 2013), with limited attention to multiple-celebrity scenarios, this study positions endorsement number as a key antecedent variable for future theoretical frameworks. Additionally, by applying the one-vs.-multiple paradigm to brand endorsement contexts, this research extends psychological findings that number systematically influences evaluations (Hamilton & Sherman, 1996; Susskind et al., 1999), contributing to literature on phenomena such as individual-group discontinuity (Insko, Schopler, Hoyle, Dardis, & Al, 1990; Schopler & Insko, 1992) and the identifiable victim effect (Small, Loewenstein, & Slovic, 2007; Slovic, 2007). This study complements recent extensions to crowdfunding (Galak et al., 2011), gift-giving (Steffel

& Le Boeuf, 2014), and information sharing (Barasch & Berger, 2014).

Second, this research refines existing conclusions on endorsement number effects. The limited prior work (Rice et al., 2012; Handriana & Wisandiko, 2017; Saleem, 2007; Thomas, 2015) has yielded inconsistent findings. This study unifies these conclusions by demonstrating that product type (identity-signaling vs. non-identity-signaling) and multiple endorsers' format (group vs. non-group) directly determine whether one or multiple endorsers is optimal. Single endorsers yield higher brand attitudes only for identity-signaling products. Moreover, when multiple endorsers are introduced as a group, multiple endorsement can surpass single endorsement.

Finally, this research enriches self-brand connection literature by identifying a novel antecedent. While existing research has examined individual factors (e.g., self-worth) and social influences (e.g., intergenerational communication, sharing methods) (Chaplin & John, 2005; Shen & Sengupta, 2018), this study reveals that endorsement number—a firm-controlled factor—can influence self-brand connection, with single endorsers more effectively building consumer-brand bridges.

7.2 Practical Implications

These findings provide evidence-based guidance for implementing brand endorsement strategies. First, firms should carefully consider endorser number to maximize brand benefits. Results indicate that, generally, selecting one endorser is superior to multiple endorsers in enhancing brand attitude because single endorsers foster stronger emotional consumer-brand connections, providing a strategic entry point for brand positioning.

Second, the superiority of single endorsers applies only to identity-signaling products such as watches, apparel, and automobiles. Luxury brands' practices align with this finding: Dior invited Yang Ying as its sole China spokesperson, while Rolex once employed 42 endorsers. This research shows that when multiple endorsers are framed as a group, multiple endorsement can outperform single endorsement. Firms can invite actual groups (e.g., Honor of Kings endorsed by Mayday, Boom Beach endorsed by Happy Family including He Jiong, Xie Na, Li Weijia, Wu Xin, and Du Haitao), frame multiple endorsers as a group (e.g., PepsiCo's "Pepsi Family"), or use external cues to "package" multiple endorsers as a unified whole (e.g., Rolex's 42 athlete endorsers, Dove pairing endorsers Yang Ying and Li Yifeng as a "CP"). Thus, when planning multiple-celebrity endorsements, firms should consider endorser compatibility and analyze product characteristics and target audiences (e.g., consumers high in identity needs) to tailor endorsement strategies.

7.3 Limitations and Future Directions

This research has limitations warranting future investigation. First, it focused exclusively on real celebrity endorsers, not virtual endorsers (e.g., M&M's Yellow and Red characters). Since the key mechanism—self-brand connection—

involves interpersonal relationships, whether endorsement number effects apply to virtual endorsers requires examination. Second, Experiment 2 found marginal effects on perceived variety; future research could explore how endorsement number influences perceived product diversity. Third, Experiment 4 only compared group-type multiple endorsement to single endorsement; future studies could directly measure differential effects between single and group-type multiple endorsement. Fourth, while this research focused on endorsement effects on brand attitude, prior work shows endorsement also influences perceptions of endorsers themselves (Ilicic & Webster, 2013). Future research could examine whether endorsement number affects perceived endorser identity or evaluations of other endorsed advertisements.

Finally, this research identified product type and multiple endorsers' format as boundary conditions, but other endorsement context factors may influence results. We propose two potential group-related moderators: (1) For group-labeled products, multiple endorsers may be more image-congruent, potentially making multiple endorsement superior, and (2) when strong group pressure and social norms exist, multiple endorsers may symbolize social consensus that enhances consumer preference. Future research should explore these factors, along with brand relationship types (exchange vs. partnership) and consumer values (independent vs. interdependent), as potential moderators of endorsement number effects.

References

Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of other in the self scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology*, 63(4), 596–612.

Barasch, A. & Berger, J. (2014). Broadcasting and narrowcasting: How audience size affects what people share. *Journal of Marketing Research*, 51(3), 286–299.

Bartz, S., Molchanov, A., & Stork, P. A. (2013). When a celebrity endorser is disgraced: A twenty-five-year event study. *Marketing Letters*, 24(2), 131–141.

Chaplin, L. & John, D. R. (2005). The development of self-brand connections in children and adolescents. *Journal of Consumer Research*, 32(1), 119–129.

Chen, A. C. H., Chang, R. Y. H., Besherat, A., & Baack, D. W. (2013). Who benefits from multiple brand celebrity endorsements? An experimental investigation. *Psychology & Marketing*, 30(10), 667–679.

Cheng, S. Y. Y., White, T. B., & Chaplin, L. N. (2012). The effects of self-brand connections on responses to brand failure: A new look at the consumer–brand relationship. *Journal of Consumer Psychology*, 22(2), 280–288.

Choi, S. M. & Rifon, N. J. (2012). It is a match: The impact of congruence between celebrity image and consumer ideal self on endorsement effectiveness.

Psychology & Marketing, 29(9), 639–650.

Critcher, C. R. & Dunning, D. (2013). Predicting persons' versus a person' s goodness: Behavioral forecasts diverge for individuals versus populations. *Journal of Personality and Social Psychology*, 104(1), 28–44.

Critcher, C. R. & Dunning, D. (2014). Thinking about others versus another: Three reasons judgments about collectives and individuals differ. *Social and Personality Psychology Compass*, 8(12), 700–710.

Cunha, M., Forehand, M. R., & Angle, J. W. (2015). Riding coattails: When co-branding helps versus hurts less-known brands. *Journal of Consumer Research*, 41(5), 1284–1300.

Elberse, A. & Verleun, J. (2012). The economic value of celebrity endorsements. *Journal of Advertising Research*, 52(2), 149–165.

Escalas, J. E. (2004). Narrative processing: Building consumer connections to brands. *Journal of Consumer Psychology*, 14, 168–179.

Escalas, J. E. & Bettman, J. R. (2017). Connecting with celebrities: How consumers appropriate celebrity meanings for a sense of belonging. *Journal of Advertising*, 46(2), 297–308.

Evers, E. R., Inbar, Y., & Zeelenberg M. (2014). Set-fit effects in choice. *Journal of Experimental Psychology: General*, 143(2), 504–509.

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses.* Behavior Research Methods*, 41(4), 1149–1160.

Galak, J., Small, D. A., & Stephen, A. T. (2011). Micro-finance decision making: A field study of prosocial lending. *Journal of Marketing Research*, 48(Special Issue), S130–S137.

Gao, H., Winterich, K. P., & Zhang, Y. (2016). All that glitters is not gold: How others'status influences the effect of power distance belief on status consumption. *Journal of Consumer Research*, 43(2), 265–281.

Handriana, T. & Wisandiko, W. R. (2017). Consumer attitudes toward advertisement and brand, based on the number of endorsers and product involvement: An experimental study. *Gadjah Mada International Journal of Business*, 19(3), 289–306.

Hamilton, D. L. & Sherman, S. J. (1996). Perceiving persons and groups. *Psychological Review*, 103(2), 336–355.

Halevy, N., Chou, E. Y., Cohen, T. R., & Livingston, R. W. (2011). Status conferral in intergroup social dilemmas: Behavioral antecedents and consequences of prestige and dominance. *Journal of Personality and Social Psychology*, 102(2), 351–366.

Hayes, A. F. & Preacher, K. J. (2014). Statistical mediation analysis with a multicategorical independent variable. *British Journal of Mathematical and Statistical Psychology*, 67(3), 451–470.

Hsu, C. K., & McDonald, D. (2002). An examination on multiple celebrity endorsers in advertising. *Journal of Product & Brand Management*, 11(1), 19–29.

Huang, M., Yao, S., & Liu, M. (2018). Self-enhancing or self-deprecating: How can celebrity endorsement enhance the marketing effectiveness of advertisements in social media. *Acta Psychologica Sinica*, 50(8), 907–919.

Huber, F., Meyer, F., Vogel, J., Weihrauch, A., & Hamprecht, J. (2013). Endorser age and stereotypes: Consequences on brand age. *Journal of Business Research*, 66, 207–215.

Ilicic, J. & Webster, C. M. (2013). Celebrity co-branding partners as irrelevant brand information in advertisements. *Journal of Business Research*, 66(7), 941–947.

Insko, C. A., Schopler, J., Hoyle, R. H., Dardis, G. J., & Al, E. (1990). Individual-group discontinuity as a function of fear and greed. *Journal of Personality and Social Psychology*, 58(1), 68–79.

Iyengar, S., Jackman, S., Messing, S., Valentino, N., Aalberg, T., Duch, R., ···& Kobayashi, T. (2013). Do attitudes about immigration predict willingness to admit individual immigrants? A cross-national test of the person-positivity bias. *Public Opinion Quarterly*, 77(3), 641–665.

Janiszewski, C. (1993). Preattentive mere exposure effects. *Journal of Consumer Research*, 20(3), 376–392.

Köhler, W. (1970). *Gestalt Psychology: An Introduction to New Concepts in Modern Psychology*. New York: Liveright Publishing Corporation.

Lafferty, B. A., Goldsmith, R. E., & Newell, S. J. (2002). The dual credibility model: The influence of corporate and endorser credibility on attitudes and purchase intentions. *Journal of Marketing Theory & Practice*, 10(3), 1–12.

Louie, T. A. & Obermiller, C. (2002). Consumer response to a firm' s endorser (dis)association decisions. *Journal of Advertising*, 31(4), 41–52.

McCracken, G. (1989). Who is the celebrity endorser? Cultural foundations of the endorsement process. *Journal of Consumer Research*, 16(3), 310–321.

Miller, F. M. & Allen, C. T. (2012). How does celebrity meaning transfer? Investigating the process of meaning transfer with celebrity affiliates and mature brands. *Journal of Consumer Psychology*, 22(3), 443–452.

Mishra, H., Mishra, A., & Nayakankuppam, D. (2006). Money: A bias for the whole. *Journal of Consumer Research*, 32(4), 541–549.

Newheiser, A. K., Sawaoka, T., & Dovidio, J. F. (2012). Why do we punish groups? High entitativity promotes moral suspicion. *Journal of Experimental Social Psychology*, 48(4), 931–936.

Niculescu, M., Payne, C. R., & Krishnan, V. (2013). One-to-one and one-to-many relationship marketing: Toward a theoretical framework. *Journal of Business-to-Business Marketing*, 20(2), 113–136.

Otterbring, T., Ringler, C., Sirianni, N. J., & Gustagsson, A. (2018). The Abercrombie & Fitch effect: The impact of physical dominance on male customers' status-signaling consumption. *Journal of Marketing Research*, 55(1), 69–79.

Packard, G., Moore, S. G., & McFerran, B. (2018). (I' m) happy to help (you): The impact of personal pronoun use in customer–firm interactions. *Journal of Marketing Research*, 55(4), 541–555.

Palmatier, R. W., Scheer, L. K., Houston, M. B., Evans, K. R., & Gopalakrishna, S. (2007). Use of relationship marketing programs in building customer–salesperson and customer–firm relationships: Differential influences on financial outcomes. *International Journal of Research in Marketing*, 24(3), 210–223.

Park, C. W., Eisingerich, A. B., & Park, J. W. (2013). Attachment–aversion (aa) model of customer–brand relationships. *Journal of Consumer Psychology*, 23(2), 229–248.

Park, C. W., Jaworski, B. J., & Maclnnis, D. J. (1986). Strategic brand concept-image management. *Journal of Marketing*, 50(4), 135–145.

Park, C. W., MacInnis, D. J., Priester, J., Eisingerich, A. B., & Iacobucci, D. (2010). Brand attachment and brand attitude strength: Conceptual and empirical differentiation of two critical brand equity drivers. *Journal of Marketing*, 74, 1–17.

Petty, R. E., Cacioppo, J. T., & Schumann, D. (1983). Central and peripheral routes to advertising effectiveness: The moderating role of involvement. *Journal of Consumer Research*, 10(2), 135–146.

Preacher, K. J. & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891.

Rice, D. H., Kelting, K., & Lutz, R. J. (2012). Multiple endorsers and multiple endorsements: The influence of message repetition, source congruence and involvement on brand attitudes. *Journal of Consumer Psychology*, 22(2), 249-259.

Schopler, J. & Insko, C. A. (1992). The discontinuity effect in interpersonal and intergroup relations: generality and mediation. *European Review of Social Psychology*, 3(1), 121–151.

Sears, D. O. (1983). The person-positivity bias. *Journal of Personality & Social Psychology*, 44(2), 233–250.

Shaddy, F. & Fishbach, A. (2016). Seller beware: How bundling affects valuation. *Journal of Marketing Research*, 54(5), 737–751.

Shen, H. & Sengupta, J. (2018). Word of mouth versus word of mouse: Speaking about a brand connects you to it more than writing does. *Journal of Consumer Research*, 45(3), 595–614.

Slovic, P. (2010). "If I look at the mass I will never act" : Psychic numbing and genocide. *Social Science Electronic Publishing*, 2(April), 79–95.

Small, D. A., Loewenstein, G., & Slovic, P. (2007). Sympathy and callousness: The impact of deliberative thought on donations to identifiable and statistical victims. *Organizational Behavior and Human Decision Processes*, 102(2), 143–153.

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(6), 845–851.

Steffel, M. & Le Boeuf, R. A. (2014). Overindividuation in gift giving: Shopping for multiple recipients leads givers to choose unique but less preferred gifts. *Journal of Consumer Research*, 40(6), 1167–1180.

Susskind, J., Maurer, K., Thakkar, V., Hamilton, D. L., & Sherman, J. W. (1999). Perceiving individuals and groups: Expectancies, dispositional inferences, and causal attributions. *Journal of Personality and Social Psychology*, 76(2), 181–191.

Thomas, V. L. & Fowler, K. (2015). More isn' t always better: Exploring the influence of familiarity when using multiple celebrity endorsers. *Journal of Promotion Management*, 21(2), 208–223.

Um, N. (2008). Exploring the effects of single vs. multiple products and multiple celebrity endorsements. *Journal of Management and Social Sciences*, 4, 104–114.

van der Veen, R. & Song, H. (2014). Impact of the perceived image of celebrity endorsers on tourists' intentions to visit. *Journal of Travel Research*, 53(2), 211–224.

White, K., Lin, L., Dahl, D. W., & Ritchie, R. J. (2016). When do consumers avoid imperfections? Superficial packaging damage as a contamination cue. *Journal of Marketing Research*, 53(1), 110–123.

Willis, J. & Todorov, A. (2006). First impressions: Making up your mind after a 100-ms exposure to a face. *Psychological Science*, 17(7), 592–598.

Zhou, X., Kim, S., & Wang, L. (2019). Money helps when money feels: Money anthropomorphism increases charitable giving. *Journal of Consumer Research*, 45(5), 953–972.