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The Impact of Dialectical Thinking on Androgynous Brand Equity across Cultures: The Moderating Role of Brand Positioning

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Design/methodology/approach – We did two experiments with 400 Chinese consumers (high in dialectical thinking) and 528 British consumers (low in dialectical thinking) to test our framework.

Purpose – Our research examines the impact of cross-cultural difference in dialectical thinking on consumers' responses to androgynous brands and its implication for brand equity. Our research also aims to see how consumers take both feminine and masculine attributes into consideration to form their judgments of androgynous brand equity and whether this process is moderated by brand positioning.

Findings – Our experimental results suggest an androgynous brand has higher brand equity in China than in the U.K. Furthermore, Chinese consumers rate higher feminine/masculine attributes of masculine/feminine brands. In addition, an androgynous brand's equity is mainly driven by its less dominant attributes. Finally, our results suggest that brand positioning moderates the mediating role of less dominant attributes, more evident when brand positioning matches (vs. mismatches) an androgynous brand's more dominant attributes.

Originality/value – By focusing on cross-cultural differences in dialectical thinking, our research offers a novel approach to reconcile existing inconclusive results on androgynous brand equity. Second, to our best knowledge, our research is the first to examine how feminine and masculine attributes jointly decide androgynous brand equity. Finally, by focusing on brand positioning, our research highlights the importance of an androgynous brand's less dominant attributes in driving its brand equity and provides a tool international marketing managers can use to strengthen such influence.

1. Introduction

Brand equity as a market-based intangible asset is one of the most established concepts in marketing (Lieven and Hildebrand, 2016; Chatzipanagiotou *et al.*, 2019; Christodoulides *et al.*, 2015; Zarantonello *et al.*, 2020). However, it has received limited attention in international marketing research (Chatzipanagiotou *et al.*, 2019; Christodoulides *et al.*, 2015). Lieven and Hildebrand (2016) suggest that a key source of brand equity in the global market is a brand's masculine and/or feminine personality attributes—specifically, its brand gender. Nevertheless, how to use brand gender to create positive brand equity across cultures remains unclear. The extant brand gender literature mainly focuses on masculine or feminine brands (Grohmann, 2009; Lieven *et al.*, 2014; Machado *et al.*, 2019; Pogacar *et al.*, 2021; Spielmann *et al.*, 2021). However, Tan (2016) has noted we are in the midst of a "gender revolution" where the very idea of only two genders (male and female) exists is disputable. Instead, people may identify as both male and female at one time or as different genders at different times (Richards *et al.*, 2016). Additionally, Hester *et al.* (2020) suggests the traditional "feminine" and "masculine" appearances have lost popularity in favor of more androgynous looks. This is particularly evident in East Asia, where a more androgynous appearance (e.g., a male looking soft yet manly at the same time) is preferred over traditional feminine/masculine looks (Hester *et al.*, 2020). Thus, positioning a brand as either masculine or feminine may have difficulty in appealing to the current global market.

As a result, Lieven and Hildebrand (2016) argue an androgynous brand which combines feminine attributes with masculine attributes is a viable strategy to appeal to consumers across cultures. However, research on androgynous brand equity is limited and contradictory (Grohmann, 2009; Lieven *et al.*, 2014; Lieven and Hildebrand, 2016; Van Tilburg *et al.*, 2015). On the one hand, positioning a brand as androgynous has a positive impact on brand equity because it is flexible and

adaptive (Lieven and Hildebrand, 2016; Van Tilburg *et al.*, 2015). On the other hand, a brand that combines feminine with masculine attributes damages brand equity because it is difficult for consumers to process (Grohmann, 2009; Lieven *et al.*, 2014).

To reconcile existing inconclusive results, the first purpose of our research was to explore the impact of cultural differences in tolerance for holding apparently contradictory beliefs - dialectical thinking (Peng and Nisbett, 1999) on androgynous brand equity. In particular, the first research question we wanted to address is how consumers with high (vs. low) dialectical thinking judge androgynous brand equity differently. To answer this question, we compared an androgynous brand equity in China and the United Kingdom (UK). Peng and Nisbett (1999) proposed that Chinese consumers apparently tend to accept contradictory beliefs - high dialectical thinking. In contrast, British consumers tend to experience difficulties in processing contradictory information - low dialectical thinking (DeMotta *et al.*, 2016). Since an androgynous brand combines feminine attributes with masculine attributes, we argue Chinese consumers tend to process androgynous brands more positively than British consumers because the former are more comfortable with processing contradictory information than the latter (DeMotta *et al.*, 2016). Subsequently, an androgynous brand has higher brand equity in China than in the UK.

Furthermore, extant literature provides little insight into how consumers process an androgynous brand's feminine and masculine attributes together to form their judgments of brand equity. Instead, previous studies have mainly focused on the separate effects of feminine or masculine attributes on brand equity (Grohmann, 2009; Lieven *et al.*, 2014; Van Tilburg *et al.*, 2015). This is surprising given the existing brand gender literature concurs that androgynous brand equity is driven by both feminine and masculine attributes (Grohmann, 2009; Lieven and Hildebrand, 2016). Thus, the second aim of our research is to examine how consumers consider both feminine and masculine

attributes to form their judgments of androgynous brand equity. The second research question we wanted to address was how consumers integrate an androgynous brand's feminine and masculine attributes to form their judgments of brand equity. To answer this question, we used schema congruity theory (Mandler, 1982), which argues that information perceived as schema congruent generates limited cognitive processing. In contrast, information incongruent with schema triggers extensive cognitive processing (Mandler, 1982). Based on this theory, we argue that an androgynous brand's less (vs. more) dominant attributes play a stronger role in deciding its brand equity because such attributes are arousing and stimulating (Noseworthy *et al.*, 2014). Consequently, consumers pay more attention to these attributes and are more likely to be persuaded by them (Noseworthy and Trudel, 2011).

If an androgynous brand equity is mainly driven by its less (vs. more) dominant features, our final research aim is to see how international marketing managers can strengthen the influence of such features. In particular, the final research question we wanted to address was how brand positioning can moderate the influence of an androgynous brand's less (vs. more) dominant features on brand equity. To answer this, we built on the literature on brand positioning and product gender (Chang, 2004; Schnurr, 2017), arguing that if an androgynous brand's positioning matches its more dominant attributes, it strengthens the influence of less dominant attributes. This is because when brand positioning matches the more dominant attributes, it makes the less dominant attributes even more arousing and stimulating, thereby intensifying their influence on brand equity (Noseworthy *et al.*, 2014). Figure 1 summarizes the conceptual framework.

[Insert Figure 1 about here]

To answer our research questions and achieve our research aims, we conducted two experiments with 528 British consumers and 400 Chinese consumers. Our experimental results provide

convergent evidence for the proposed framework. This can extend the extant literature on several fronts in several ways. First, by focusing on cross-cultural differences in dialectical thinking, our research offers rare insights into how consumers' responses toward androgynous brand equity differ across cultures**. This is particularly important for global interactive marketing where user-generated content (UGC) has replaced traditional celebrity for micro-influencer marketing (Wang, 2021). Our research suggests androgynous brands' UGC can target at high dialectical thinking consumers (e.g. East Asian consumers). This can strengthen their identification and engagement (Graham and Wilder, 2020; Puligadda *et al.*, 2021) with androgynous brands, leading to increased brand equity.** Second, while previous studies mainly focused on the separate effects of feminine or masculine attributes (Grohmann, 2009; Lieven *et al.*, 2014; Van Tilburg *et al.*, 2015), to the best of our knowledge, this study is the first to examine how feminine and masculine attributes jointly decide androgynous brand equity. We conceptualize and empirically demonstrate that androgynous brand equity is mainly driven by less (vs. more) dominant attributes of the brand. Therefore, when designing an androgynous brand for consumers across cultures, international marketing managers need to focus on its less dominant attributes to generate positive responses. **This is particularly crucial for consumers with high brand schematicity because their engagement with brands focuses on brand schema (Puligadda *et al.*, 2021).** Finally, while the importance of brand positioning is widely acknowledged (Hirschman and Holbrook, 1982; Batra and Ahtola, 1991; Voss *et al.*, 2003), to the best of our knowledge, no research has examined how it influences consumers' perceptions of androgynous brands. Given this, our research provides initial evidence for this issue. Our results suggest that when an androgynous brand's positioning matches its more dominant attributes, it can intensify the influence of less dominant attributes, leading to more positive outcomes. Thus, our research not

only highlights the importance of an androgynous brand's less dominant attributes in driving its brand equity, but also demonstrates how brand positioning can moderate such influence.

2. Theoretical background and hypotheses development

2.1. Androgynous brand equity

Brand equity captures the value that consumers attribute to a brand (Lieven and Hildebrand, 2016; Chatzipanagiotou *et al.*, 2019; Christodoulides *et al.*, 2015; Zarantonello *et al.*, 2020). However, it has received limited attention in international marketing research (Lieven and Hildebrand, 2016; Chatzipanagiotou *et al.*, 2019; Christodoulides *et al.*, 2015; Zarantonello *et al.*, 2020). Lieven and Hildebrand (2016) suggest that brand gender is a key factor in determining brand equity in the global market. In one of the seminal researches on brand gender, Grohmann (2009) defines the construct as "the set of human personality traits associated with masculinity and femininity applicable and relevant to brands" (p. 106). Grohmann (2009) further argues that brand gender includes two independent dimensions: masculine brand personality (MBP) and feminine brand personality (FBP). Thus, brand gender can be classified into four categories: masculine (high on masculinity and low on femininity); feminine (high on femininity and low on masculinity); androgynous (high on both dimensions); and undifferentiated (low on both dimensions) (Grohmann, 2009). Building on Grohmann's work, recent studies have demonstrated that brand gender can have a significant impact on brand equity above and beyond brand personality (Azar *et al.*, 2018; Lieven *et al.*, 2015). It also positively influences consumers' affective, attitudinal, and behavioral responses, such as the likelihood of recommending the brand (Guèvremont and

Grohmann, 2014); brand preferences (Lieven *et al.*, 2015); brand attitudes (Azar *et al.*, 2018); and brand love (Machado *et al.*, 2019).

Nevertheless, how brand gender can be used to create positive brand equity across cultures remains unclear. This is particularly evident for androgynous brands, with current limited research providing contradictory results (Grohmann, 2009; Lieven *et al.*, 2014; Lieven and Hildebrand, 2016; Van Tilburg *et al.*, 2015). For example, both Lieven and Hildebrand (2016) and Van Tilburg *et al.* (2015) argue that androgynous brands generate higher brand equity and more positive consumer responses than masculine or feminine brands. Machado *et al.* (2019) and Azar *et al.* (2018) find that brand equity increases with both high masculinity and high femininity attributes. The superiority of androgynous brands is explained via gender schemata literature, which suggests that androgynous individuals have multiple advantages such as higher adaptability to ambiguous situations (Bem, 1974), greater career success, and greater attractiveness (Jackson, 1983). However, Grohmann (2009) and Lieven *et al.* (2014) report that positioning a brand as androgynous can have a detrimental impact on brand equity for two reasons; first: the mate selection theory argues that highly prototypical male or female attributes are appealing because they are perceived as good indicators of the ability to produce healthy offspring (Symons, 1979). As a result, Lieven *et al.* (2014) argue that masculine or feminine brands can be easily processed because of the link between masculinity/femininity and attractiveness proposed by the mate selection theory. In contrast, androgynous brands have both strong masculinity and femininity attributes. This reduces the clarity of positioning, making it difficult for consumers to categorize (Lieven *et al.*, 2014). Second, consumers tend to associate human personality characteristics with brands because they perceive brands as extensions of themselves (Belk and Costa, 1998). Gender is a central part of consumers' self-concept (Grohmann, 2009). Therefore, the brand gender

literature argues that brands need to be positioned either as masculine or feminine to be congruent with consumers' self-concept (e.g., Nickel *et al.* (2020); van den Hende and Mugge (2014)). However, consumers' desire for self-congruent brands is based on the assumption that people are motivated by self-consistency (van den Hende and Mugge, 2014). However, cross-cultural research suggests that Chinese consumers place less value on self-congruency (Spencer-Rodgers *et al.*, 2009; Boucher, 2011; English and Chen, 2007). Thus, they may consider masculine or feminine brands as less appealing. Instead, they prefer androgynous brands because the combination of both masculine and feminine attributes can help them adapt to different contexts (DeMotta *et al.*, 2016). The next section discusses this issue in detail.

2.2. Cultural differences in dialectical thinking

Peng and Nisbett (1999) propose dialectical thinking to explain cross-cultural differences in tolerance for holding apparently contradictory beliefs between East Asia and the West. According to Peng and Nisbett (1999), people in East Asia (high dialectical thinking) believe the universe is in a state of flux, with each element transformed into its opposite in a perceptual cycle of change. In contrast, people in the West (low dialectical thinking) expect change to be more temporary and linear in nature (Spencer-Rodgers *et al.*, 2010). Peng and Nisbett (1999) further argue that people with high dialectical thinking expect the universe to be constantly changing, and thus they believe what is true at one moment in time may not be true at another moment in time. Consequently, they accept that contradiction is also constant, with good and bad coexisting in everything (Peng and Nisbett, 1999). In contrast, the law of non-contradiction adopted by the Western tradition since Aristotle asserts that contradictory propositions cannot be true or false at the same time. As a result, opposing attributes must be analytically reconciled through formal logic (Peng and Nisbett, 1999).

Extant literature has provided robust evidence that dialectical thinking can have a profound influence on people's judgment and decision-making (see Spencer-Rodgers *et al.* (2010) for a review). For example, in terms of self-concept, Westerners tend to emphasize expressing and consistently affirming one's unique attributes over time and across different contexts (Markus and Kitayama, 1991). In contrast, East Asians place less emphasis on self-consistency because they tend to endorse contradictory self-knowledge. Subsequently, their self-identities are less clearly defined and vary across different situations (Spencer-Rodgers *et al.*, 2004; Spencer-Rodgers *et al.*, 2009; Boucher, 2011). In marketing, research has repeatedly demonstrated that consumers with high (vs. low) dialectical thinking are more comfortable and more fluent in processing contradictory information, such as mixed product attributes (DeMotta *et al.*, 2016; Wang *et al.*, 2016; Pang *et al.*, 2017); contradictory product reviews (Hwang *et al.*, 2018); and incongruent co-branding personality traits (Wang *et al.*, 2020). Thus, they have more favorable attitudes and higher purchase intentions (DeMotta *et al.*, 2016; Wang *et al.*, 2016; Wang *et al.*, 2020; Pang *et al.*, 2017).

As discussed above, our first research question is: How do consumers with high (vs. low) dialectical thinking judge androgynous brand equity differently? Building on the above literature, we argue that an androgynous brand leads to higher brand equity in China (high dialectical thinking) than in the UK (low dialectical thinking) for two reasons: first, an androgynous brand has both strong masculinity and femininity attributes that are widely perceived as opposite concepts. As a result, British consumers who endorse the law of non-contradiction find it difficult to process and categorize (Lieven *et al.*, 2014). So, this reduces their judgmental confidence, leading to more moderate attitudes (DeMotta *et al.*, 2016). In contrast, Chinese consumers expect contradictory information to coexist and are comfortable processing it (Peng and Nisbett, 1999). This makes

them respond more positively to an androgynous brand (DeMotta *et al.*, 2016; Wang *et al.*, 2016; Wang *et al.*, 2020; Pang *et al.*, 2017). Second, British consumers are motivated to self-consistency across contexts (van den Hende and Mugge, 2014; Markus and Kitayama, 1991). Thus, they are unlikely to find an androgynous brand appealing because its mixed masculinity and femininity attributes make it difficult for them to express their identities consistently across contexts (Lieven *et al.*, 2014). In contrast, Chinese consumers place less emphasis on self-consistency, but more on adaptability (Spencer-Rodgers *et al.*, 2004; Spencer-Rodgers *et al.*, 2009; Boucher, 2011). Thus, they find an androgynous brand appealing because the combination of masculinity and femininity attributes can help them adapt to different contexts. Taken together, we predict the following:

H1 (direct effect): An androgynous brand has higher brand equity in China than in the UK.

However, one may argue that Chinese and British consumers respond differently to an androgynous brand because of other cultural differences, such as masculinity/femininity (Hofstede, 2001; House *et al.*, 2004). In his cultural dimensional theory, Hofstede (2001) argues that different societies differ in masculinity and femininity. In societies that value masculinity, males are expected to be assertive and competitive. In contrast, in societies that value femininity, both men and women need to be modest and caring (Hofstede, 2001). Similarly, in the Global Leadership and Organizational Effectiveness (GLOBE) project, House *et al.* (2004) point out that different cultures differ in assertiveness and humane orientation. Assertiveness focuses on the degree to which societies encourage individuals to be assertive, confrontational, and aggressive (House *et al.*, 2004). Thus, it is similar to masculinity in cultural dimensional theory (Hofstede, 2001). Humane orientation refers to the degree to which societies encourage individuals to be generous, kind, and caring (House *et al.*, 2004). Thus, it is similar to femininity in the cultural dimensional theory (Hofstede, 2001).

Conceptually, dialectical thinking differs from masculinity/femininity (Hofstede, 2001; House *et al.*, 2004). While dialectical thinking captures cultural differences in tolerance for holding apparently contradictory beliefs (Peng and Nisbett, 1999), masculinity/femininity reflects norms and values differences across cultures (Spencer-Rodgers *et al.*, 2010). To demonstrate that H1 is driven by cultural differences in dialectical thinking not masculinity/femininity, we provide further hypotheses regarding how Chinese (vs. British) consumers show differences in their perceptions of feminine/masculine attributes of a masculine/feminine brand.

Spencer-Rodgers *et al.* (2010) argue that East Asians believe the world is constantly changing, and thus their classification systems are fuzzier with more diffuse boundaries. Additionally, East Asians accept everything comprising contradictory elements (e.g., masculinity vs. femininity), and thus they tend to perceive objects that belong to at least two distinct categories (Spencer-Rodgers *et al.*, 2010). As a result, we argue that compared with British consumers, Chinese consumers tend to give higher ratings of feminine/masculine attributes of a masculine/feminine brand because they consider univalent information incomplete. Supporting this, Wang *et al.* (2016) find when given univalent information, consumers with high (vs. low) dialectical thinking have more thoughts about information opposite in valence to that presented.

It should be noted that these predictions cannot be explained by masculinity/femininity. In fact, both Hofstede (2001) and House *et al.* (2004) propose that Britain has a stronger masculinity than China. Thus, focusing on masculinity/femininity would lead to the prediction that Chinese (vs. British) consumers would give higher ratings to feminine attributes to both masculine and feminine brands. However, guided by principles of constant change and tolerant contradiction (Spencer-Rodgers *et al.*, 2010), we predict that Chinese (vs. British) consumers give higher ratings to the

masculine attributes of a feminine brand and higher ratings to the feminine attributes of a masculine brand. So, to formally put it:

H2 (direct effect): For a masculine brand, feminine attributes are rated higher in China than in the UK.

H3 (direct effect): For a feminine brand, masculine attributes are rated higher in China than in the UK.

2.3. The mediation role of MBP and FBP on androgynous brand equity

A key limitation of the extant literature is that it provides little insight into how consumers process an androgynous brand's feminine and masculine attributes together to form their judgment of its brand equity. Thus, our second research aim focuses on how consumers integrate an androgynous brand's feminine and masculine attributes to form their judgments of brand equity. To achieve this research aim, we focus on how Chinese (vs. British) consumers cope with the contradiction between masculine and feminine brand attributes. Owing to high dialectical thinking, Chinese consumers expect masculine and feminine attributes to coexist (Peng and Nisbett, 1999); consequently, they use both attributes to form their judgments. British consumers will also consider both masculine and feminine attributes. However, unlike Chinese consumers who accept their coexistence, guided by the law of non-contradiction, British consumers integrate these attributes to maintain consistency (Peng and Nisbett, 1999).

We further argue that an androgynous brand's less (vs. more) dominant attributes play a stronger role in deciding its brand equity. Since different consumers may have different perceptions of the same features, they may perceive an androgynous brand's one type of attribute stronger than the other (e.g., masculine dominating over feminine features). Previous research suggests that

consumers consider less dominant attributes arousing and stimulating because they are not congruent with the overall schema (Noseworthy *et al.*, 2014). As a result, they pay more attention to these attributes and are more likely to be persuaded by them (Noseworthy and Trudel, 2011). In contrast, the dominant attributes are not engaging, as they are congruent with the overall schema (Noseworthy *et al.*, 2014; Noseworthy and Trudel, 2011). Therefore, we argue that an androgynous brand's equity is mainly decided by how consumers form their judgment toward its less dominant features. Thus, we present the following:

H4 (mediation): Androgynous brand equity is driven by both MBP and FBP, with the less dominant attributes having a stronger indirect effect.

2.4. The moderating role of brand positioning

While the importance of brand positioning is widely acknowledged (Hirschman and Holbrook, 1982; Batra and Ahtola, 1991; Voss *et al.*, 2003), the mechanism by which it influences androgynous brand equity remains unclear. Thus, our final research question is how brand positioning moderates the influence of an androgynous brand's less (vs. more) dominant features on its brand equity. To answer this question, we built on the literature on brand positioning and product gender (Chang, 2004; Schnurr, 2017) that differentiates the utilitarian and hedonic benefits of a brand. Utilitarian benefits are determined by the functions performed by products, whereas hedonic benefits are determined by the experience of using products (Hirschman and Holbrook, 1982; Batra and Ahtola, 1991; Voss *et al.*, 2003). Advertising appeals using utilitarian and hedonic positioning strategies are common (Chang, 2004; Johar and Sirgy, 1991). A utilitarian appeal strategy consists of presenting attributes that highlight the functionality of the product, whereas a hedonic appealing strategy emphasizes the self-expression and enjoyment dimensions (Johar and Sirgy, 1991; Voss *et al.*, 2003).

Relating to our research, extant literature suggests that utilitarian or hedonic positioning is cognitively associated with different gender stereotypes. The instrumentality dimension of utilitarian products is associated with masculine traits, whereas the affectionate and empathetic dimensions of hedonic products are associated with feminine traits (Chang, 2004). Schnurr (2017) further suggests that feminine products are preferred when they are hedonically positioned, whereas masculine products are evaluated more favorably when the products are functionally positioned.

Building on previous research, we further argue that if an androgynous brand's positioning matches its more dominant attributes (e.g., utilitarian positioning matches masculine features), it strengthens the influence of less dominant features. This is because when brand positioning matches more dominant features, it makes the less dominant attributes more arousing and stimulating because they are more incongruent with the overall schema (Noseworthy *et al.*, 2014). Subsequently, consumers are more likely to pay attention to these attributes and to be persuaded by them (Noseworthy and Trudel, 2011). In contrast, if an androgynous brand's positioning mismatches its more dominant attributes (e.g., hedonic positioning mismatches masculine features), it reduces the influence of less dominant features. This is because when brand positioning mismatches more dominant features, it reduces the clarity of the overall schema, making less dominant attributes less arousing. Taken together, we predict that the mediating role of less dominant attributes depends on brand positioning, which is more evident when brand positioning matches (vs. mismatches) an androgynous brand's more dominant features.

H5 (moderated mediation): Brand positioning moderates the mediation of MBP and FBP on brand equity (H4) such that the mediation is more evident when brand positioning matches (vs. mismatches) with the more dominant attributes of an androgynous brand.

3. Research methodology

We conducted two experiments to test the proposed framework. Study 1 provides initial evidence of our framework by testing H1 through H4. Building on Study 1, Study 2 tests the moderating role of brand positioning. We adopted an experimental design because in experiments we can exert a high degree of control over the experimental environment to isolate our theoretical mechanisms (Haslam and McGarty, 2004). Additionally, experiments have high internal validity where we can manipulate a brand's masculine and feminine attributes preceding dependent variables (brand equity) to establish the direction of causal influence (Shadish *et al.*, 2001).

4. Study 1

4.1. Participants and design

Study 1 was a one-factor (brand gender: masculine vs. feminine vs. androgynous) within-subject design with the order of different brand gender randomized among different participants. In total, 150 British consumers (40% female, 49% aged 30 or above) and 151 Chinese consumers (71% female, 20% aged 30 or above) participated in Study 1. Our British samples were recruited from Amazon.com Mechanical Turk (MTurk), which is one of the biggest online platforms for recruiting participants. Finally, our Chinese samples were recruited from WeChat, one of the largest social media platforms in China.

4.2. Experimental materials

Extant literature suggests that logo shape, font style, and brand names can influence consumers' perceptions of a brand's masculine and feminine personality traits (Lieven *et al.*, 2015; Hess and Melnyk, 2016; Wu *et al.*, 2013; Klink, 2000; Childers and Jass, 2002; Shaikh, 2006). For example, angular and heavy build shapes are perceived as masculine. In contrast, round and slender build

shapes are perceived as feminine. Regarding font style, solid, boldface fonts are considered masculine; in contrast, sleek and serif-type fonts are considered feminine. With brand names, back vowels (e.g., "o") and consonants containing stops (e.g., "b" and "k") are perceived as masculine, whereas front vowels (e.g., "e" and "i") and consonants containing fricatives (e.g., "s" and "v") are perceived as feminine (Lieven *et al.*, 2015).

Guided by the extant literature, we created three fictitious gendered brands based on a combination of brand shape, font style, and brand names. For example, "Bluk," our masculine brand, has an angular, heavy build logo, boldface fonts with its brand names containing back vowels ("u") and stop consonants ("b" and "k"). "Selvia," our feminine brand, has a slender build logo, sleek and serif-type fonts with its brand name containing front vowels ("e" and "i") and fricative consonants ("s" and "v"). Finally, our androgynous brand, "Seko", has a round but heavy build logo. It contains both front and back vowels ("e" and "o") and fricative and stop consonants ("s" and "f") (Figure 2).

[Insert Figure 2 about here]

We use fictitious brands to control consumers' existing knowledge of and attitudes toward existing brands. Extant literature suggests that consumers imbue masculine and feminine personality traits on different products (Lieven *et al.*, 2015; Schnurr, 2017). Thus, we choose product categories that are congruent with brand gender. Specifically, we chose shaving gel for masculine brands, moisturizing cream for feminine brands, and shampoo for androgynous brands.

To ensure that consumers in China and the UK do perceive the brand gender of our stimuli as intended, we performed a pretest with 82 British consumers and 75 Chinese consumers. Each consumer was randomly assigned to three fictitious brands. For each brand, consumers in both

countries were asked to rate their MBP (e.g., adventurous, aggressive) and FBP (e.g., fragile, sensitive) based on the Grohmann scale (2009) (1 = *strongly disagree*, 7 = *strongly agree*) (MBP: Cronbach's α = 0.87; FBP: Cronbach's a = 0.90).

The results showed that in both countries "Bluk" scored high on masculinity (UK: M_{MBP} = 5.13, SD = 0.97; China: M_{MBP} = 4.91, SD = 0.96) and low on femininity (UK: M_{FBP}= 2.38, SD = 1.32; China: M_{FBP}= 3.35, SD = 1.02). "Selvia" scored high on femininity (UK: M_{MBP} = 5.1, SD = 1.01; China: M_{MBP} = 4.55, SD = 0.8) and low on masculinity (UK: M_{FBP}= 2.81, SD = 1.19; China: M_{FBP}= 3.66, SD = 1.04). "Seko" scored high on masculinity (UK: M_{MBP} = 4.26, SD = 0.93; China: M_{MBP} = 4.47, SD = 0.92) and high on femininity (UK: M_{FBP}= 3.47, SD = 1.25; China: M_{FBP}= 3.73, SD = 0.86). Taken together, these results suggest that consumers in China and the UK perceive the brand gender of our stimuli as intended. Furthermore, "Seko" has stronger masculine attributes than feminine features.

4.3 Procedures and measures

Following UK national and international codes for research ethics and integrity, we first briefed the participants about their rights in the research process (e.g., all data will be anonymous and handled according to the Data Protection Act of 2018). We began by collecting the participants' age and gender (1 = male, 2 = female) as their demographic information. Then, like the pretest, each participant was assigned to our three fictitious brands in random order. For each brand, participants first rated their MBP and FBP based on the Grohmann scale (2009). Sample items of MBP were "adventurous", "brave", "sturdy", and "aggressive" (1 = *strongly disagree*, 7 = *strongly agree*). Sample items of FBP were "fragile", "sensitive", "graceful", and "tender" (1 = *strongly disagree*, 7 = *strongly agree*). Then, we gathered their judgments toward each brand's equity using the same from Brady *et al.* (2008). Because we used fictitious brands, the part corresponding to

brand loyalty was removed. Sample items in the brand equity scale were "What kind of attitude do you have about this brand?", "What kind of image does this brand have?" (1 = *strongly disagree*, 7 = *strongly agree*, Cronbach's α = 0.81). Finally, all participants were thanked and debriefed. Table 1 summarizes the measures' descriptive statistics and relevant validity metrics.

[Insert Table 1 about here]

4.4 Results

To test H1, we used one-way analysis of covariance (ANCOVA) with country (UK = 0; China =1) as the independent variable; androgynous brand equity as the dependent variable; and participants' age and gender as controls. We found an androgynous brand had higher brand equity in China (M = 5.07, SD = 1.11) than in the UK (M = 4.38, SD = 0.98; F [1, 300] = 24.85, $p < .001$). Thus, H1 is supported. No other variables were considered significant.

For H2, we used another one-way ANCOVA with country as the independent variable, rating of the feminine attributes of the masculine brand as the dependent variable, and participants' age and gender as controls. We found that the feminine attributes of the same masculine brand were rated higher in China (M = 3.19, SD = 1.35) than in the UK (M = 2.74, SD = 1.40; F (1, 300) = 7.74, p = .006). Thus, H2 is supported. No other variables were considered significant.

To test H3, we used another one-way ANCOVA with country as the independent variable, rating of the masculine attributes of the feminine brand as the dependent variable, and participants' age and gender as controls. We found that masculine attributes of the same feminine brand were rated higher in China (M = 3.79, SD = 1.23) than in the UK (M = 3.07, SD = 1.21; F (1, 300) = 21.87, $p < .001$). Thus, H3 was supported. No other variables were considered significant.

Regarding H4, we used PROCESS macro Model 4 (with 5,000 resamples) with country (UK = 0; China =1) as the independent variable, androgynous brand's MBP and FBP as the parallel mediators, brand equity as the dependent variable, and participants' age and gender as controls. We found that MBP had a significant indirect effect on androgynous brand equity (β =.1619, *SE* = .0483, 95% *CI* = .0736, .2634). Notably, FBP also had a significant indirect effect on androgynous brand equity (β = .2239, *SE* = .0594, 95% *CI* = .1146, .3495) (Figure 3). When comparing the indirect effects of FBP and MBP (FBP-MBP), unexpectedly, the results suggest that the indirect effects were not significantly different from each other (β = .0620, SE = .0725, 95% *CI* = -.0771, .2056). Thus, H4 was partly supported.

[Insert Figure 3 about here]

4.5 Study 1 Discussion

Study 1 provides initial evidence for our framework; its results suggest an androgynous brand has higher brand equity in China than in the UK. This further demonstrates that Chinese consumers give higher ratings of feminine/masculine attributes toward a masculine/feminine brand. This provides clear evidence that our results are driven by differences in dialectical thinking, not masculinity/femininity. This is because focusing on masculinity/femininity would lead to the prediction that Chinese (vs. British) consumers give higher ratings to feminine attributes to both masculine and feminine brands—however, this is not supported by Study 1. Furthermore, Study 1 finds that an androgynous brand's equity is driven by both MBP and FBP. However, unexpectedly, Study 1 revealed their influence did not significantly differ.

5. Study 2

Study 2 had two key purposes: First, to replicate Study 1 on a larger sample size to see whether sample size causes the partial support of H4 in Study 1. Second, and more importantly, Study 2 tests the moderating role of brand positioning.

5.1. Experimental design and participants

Study 2 was a one-factor (androgynous brand positioning: match vs. mismatch dominant features) between-subject design. Participants were randomly assigned to one of the two conditions. Additionally, all participants were exposed to the same masculine and feminine brands as in Study 1. We recruited participants using the same method as in Study 1. In total, 378 British consumers (40% female, 56% aged 30 or above) and 249 Chinese consumers (47% female, 26% aged 30 or above) participated in Study 2.

5.2. Experimental stimuli, procedures, and measures

Our pretest results suggest our androgynous brand has stronger masculine attributes than feminine attributes. Thus, in the match condition, the participants were exposed to utilitarian positioning. In contrast, in the mismatch condition, the participants were exposed to hedonic positioning. Extant literature suggests that utilitarian positioning focuses on functional benefits, whereas hedonic positioning focuses on the experience of using products (Hirschman and Holbrook, 1982; Batra and Ahtola, 1991; Voss *et al.*, 2003). So, the match condition (utilitarian positioning) emphasizes the functional benefits of using shampoo such as "intensive hair repair" and "increase hair density". In contrast, the mismatch condition (hedonic positioning) focuses on the experience of using shampoo such as "gently purifying hair" and "containing 3 nourishing oils". A pretest with 108 participants from the same sample pool of Study 2 (but not in Study 2) confirms that our utilitarian positioning focuses more on functional benefits than the experience of using shampoo. In contrast,

our hedonic positioning focuses more on the experience of using shampoo than on functional benefits. Taken together, this suggests that our brand-positioning manipulation is successful.

The experimental procedures and measures of Study 2 are identical to Study 1.

5.3. Results

To test H1, we used one-way ANCOVA with country (UK = 0; China = 1) as the independent variable, androgynous brand equity as the dependent variable, and participants' age and gender as controls. We found an androgynous brand had higher brand equity in China ($M = 5.63$, $SD = 1.07$) than in the UK ($M = 4.59$, $SD = 1.07$; F (1, 626) = 135.85, $p < .001$). Thus, H1 is supported. No other variables were considered significant.

To test H2, we used another one-way ANCOVA with country as the independent variable, rating of the feminine attributes of a masculine brand as the dependent variable, and participants' age and gender as controls. We found the feminine attributes of the same masculine brand were rated higher in China ($M = 3.88$, $SD = 0.97$) than in the UK ($M = 3.19$, $SD = 1.31$; F [1, 626] = 73.12, $p < .001$). Thus, H2 is supported. No other variables were considered significant.

For H3, we used another one-way ANCOVA with country as the independent variable, rating of the masculine attributes of a feminine brand as the dependent variable, and participants' age and gender as controls. We found masculine attributes of the same feminine brand were rated higher in China ($M = 4.07$, $SD = 0.58$) than in the UK ($M = 3.71$, $SD = 0.94$; F (1, 626) = 21.32, $p < .001$). Thus, H3 was supported. No other variables were considered significant.

Regarding H4, we used PROCESS macro Model 4 (with 5,000 resamples) with country (UK = 0; China =1) as the independent variable, androgynous brand's MBP and FBP as the parallel mediators, brand equity as the dependent variable, and participants' age and gender as controls.

We found that MBP had a significant indirect effect on androgynous brand equity (β =.0244, *SE* = .0134, 95% *CI* = .0002, .0523). Also, FBP had a significant indirect effect on androgynous brand equity (β =. 4113, *SE* = .0439, 95% *CI* = .3303, .5018) (Figure 4). When comparing the indirect effects of FBP and MBP (FBP-MBP), the indirect effect of FBP was significantly stronger than the indirect effect of MBP (β = .3869, *SE* = .0479, 95% *CI* = .2963, .4838). Thus, H4 is supported.

[Insert Figure 4 about here]

To test H5, we used PROCESS macro Model 7 (with 5,000 resamples) with country (UK = 0; China =1) as the independent variable, the androgynous brand's FBP as the mediator, its brand equity as the dependent variable, and brand positioning as the moderator. We found that when brand positioning mismatched more dominant features, FBP had a significant indirect effect on androgynous brand equity (β = .4104, *SE* = .0633, 95% *CI* = .2941, .5406). When brand positioning matched more dominant features, FBP also had a significant indirect effect on androgynous brand equity (β = .5794, *SE* = .0741, 95% *CI* = .4412, .7347). We calculated the index of moderated mediation, which was significant (β = .1690, *SE* = .0767, 95% *CI* = .0212, .3201). Taken together, these results support Hypothesis H5.

5.4. Study 2 discussion

Similar to Study 1, Study 2 results suggest an androgynous brand has higher brand equity in China than in the UK. This further demonstrates that Chinese consumers give higher ratings of feminine/masculine attributes toward a masculine/feminine brand, suggesting that our results are driven by differences in dialectical thinking, not masculinity/femininity. Additionally, Study 2 finds that an androgynous brand's equity is driven by both MBP and FBP, with the less dominant attributes (FBP) having a stronger influence. Finally, Study 2 suggests that brand positioning

moderates the mediation role of less dominant features, which is more evident when brand positioning matches (vs. mismatches) an androgynous brand's more dominant features.

6. General discussion

By focusing on cross-cultural differences in dialectical thinking, our first aim was to compare Chinese (vs. British) consumers' responses to androgynous brands and their implications for androgynous brand equity across cultures. Our two experiments jointly suggest that an androgynous brand has higher brand equity in China than in the UK. This is because compared with British consumers, Chinese consumers are more comfortable processing contradictory information and place more emphasis on adaptability (Peng and Nisbett, 1999). Our results also suggest that Chinese (vs. British) consumers give higher ratings of feminine/masculine attributes to a masculine/feminine brand, suggesting that our results are driven by differences in dialectical thinking, not masculinity/femininity.

The second and third aims of our research focused on how consumers consider both feminine and masculine attributes to form their judgments of androgynous brand equity and whether this process is moderated by brand positioning. Our results demonstrate that an androgynous brand's equity is driven by both MBP and FBP, with the less dominant attributes having a stronger influence. Study 2 further suggests brand positioning moderates the mediation role of less dominant features, which is more evident when brand positioning matches (vs. mismatches) an androgynous brand's more dominant features. These results have important implications for both theory and practice.

6.1. Implications for theory

Our research makes the following important contributions to the extant literature. First, brand equity as a market-based intangible asset has received limited attention in international marketing

research (Chatzipanagiotou *et al.*, 2019; Christodoulides *et al.*, 2015). Lieven and Hildebrand (2016) suggest that brand gender is a key source of brand equity in the global market. Nevertheless, how to use brand gender to create positive brand equity across cultures remains unclear. This is particularly evident among research on androgynous brands, with current limited research providing contradictory results (Grohmann, 2009; Lieven *et al.*, 2014; Lieven and Hildebrand, 2016; Van Tilburg *et al.*, 2015). Building on and extending Lieven and Hildebrand (2016), our research demonstrates cross-cultural differences toward an androgynous brand, which is more positive among consumers with high (vs. low) dialectical thinking. Thus, our research offers rare insights about cross-cultural differences toward an androgynous brand and its relevant implications for its brand equity**. This is particularly important for global interactive marketing where user-generated content (UGC) has replaced traditional celebrity for micro-influencer marketing (Wang, 2021). Our research suggests androgynous brands' UGC can target at high dialectical thinking consumers (e.g. East Asian consumers). This can strengthen their identification and engagement (Graham and Wilder, 2020; Puligadda *et al.,* 2021) with androgynous brands, leading to increased brand equity.**

Second, previous studies have mainly focused on the separate effects of feminine or masculine attributes on androgynous brand equity (Grohmann, 2009; Lieven *et al.*, 2014; Van Tilburg *et al.*, 2015). What remains unclear is how consumers process an androgynous brand's feminine and masculine attributes together to form their judgments of brand equity. Based on the schema congruity effect (Mandler, 1982), we conceptualized and empirically demonstrated that androgynous brand equity is mainly driven by less (vs. more) dominant attributes of the brand because such attributes are arousing and stimulating (Noseworthy *et al.*, 2014). As a result, consumers pay more attention to these attributes and are more likely to be persuaded by them

(Noseworthy and Trudel, 2011). Hence, our research provides initial evidence of how an androgynous brand's feminine and masculine attributes jointly decide its brand equity. **This is particularly crucial for consumers with high brand schematicity because their engagement with brands focuses on brand schema (Puligadda *et al.*, 2021).**

Finally, while the importance of brand positioning is widely acknowledged (Hirschman and Holbrook, 1982; Batra and Ahtola, 1991; Voss *et al.*, 2003), to the best of our knowledge, no research has examined how it influences consumers' perceptions of androgynous brands. Therefore, our study is the first to focus on this issue. Our results suggest that when an androgynous brand's positioning matches its more dominant attributes, it can intensify the influence of less dominant attributes, leading to more positive outcomes. Finally, our research not only highlights the importance of an androgynous brand's less dominant attributes in driving its brand equity, but also demonstrates how brand positioning can moderate such influence.

6.2. Implications for practice

Our research also has three important implications for international marketing managers. First, in terms of the target market of androgynous brands, our results suggest that Chinese (vs. British) consumers respond more positively to an androgynous brand. Therefore, international marketing managers can target consumers with high dialectical thinking (e.g., consumers in East Asia) to generate more positive outcomes. **In particular, androgynous brands' UGC can target at East Asian consumers to strengthen their identification and engagement with the focal brands.** Second, regarding androgynous brand design, an androgynous brand's equity is mainly driven by less dominant attributes. So, when designing an androgynous brand, international marketing managers should focus on their less dominant attributes to see how they can be designed to attract consumers across cultures. Third, for brand positioning, our research suggests that when an

androgynous brand's positioning matches its more dominant attributes, it can intensify the influence of less dominant attributes, leading to more positive outcomes. Thus, our research provides a practical tool that international marketing managers can use to strengthen the influence of an androgynous brand's less dominant attributes.

6.3. Limitations and future research

Although our research has important theoretical and practical implications, it has limitations. First, we only used fictitious brands to control consumers' existing attitudes toward and knowledge of real brands. Accordingly, future research can replicate our studies using real brands as stimuli to test the robustness of our framework. Second, Grohmann (2009) classifies brand gender into masculine, feminine, androgynous, and undifferentiated. While androgynous brands have strong masculine and feminine attributes, undifferentiated brands lack both. Thus, whether cultural differences influence undifferentiated brand equity awaits future research. Third, in our research, we focused only on China and the UK; notably, they differ in terms of both dialectical thinking and masculinity/femininity. Although we have empirically ruled out the influence of masculinity/femininity, future research can test our framework in other countries to compare the influence of dialectical thinking and masculinity/femininity on brand equity. Finally, a promising area which awaits future research is the examination of the joint impact of different cultural dimensions (e.g., masculinity/femininity + power distance) on consumers' responses to gendered brands. This can provide a rich understanding of the impact of cultural differences on brand equity.

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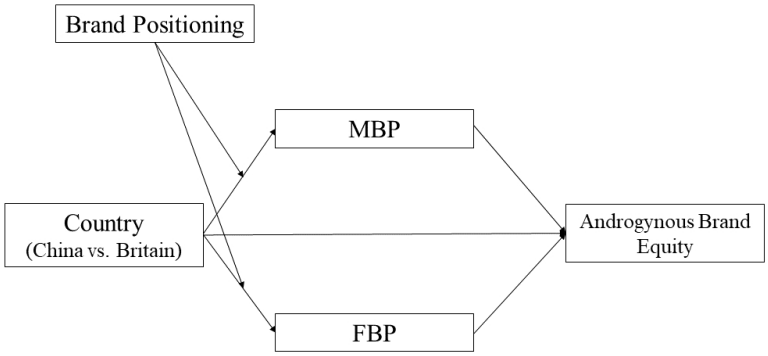

Figure 1. Theoretical framework

855x481mm (38 x 38 DPI)

Figure 2. Fictitious brands. Masculine, feminine, and androgynous brands from left to right

96x38mm (220 x 220 DPI)

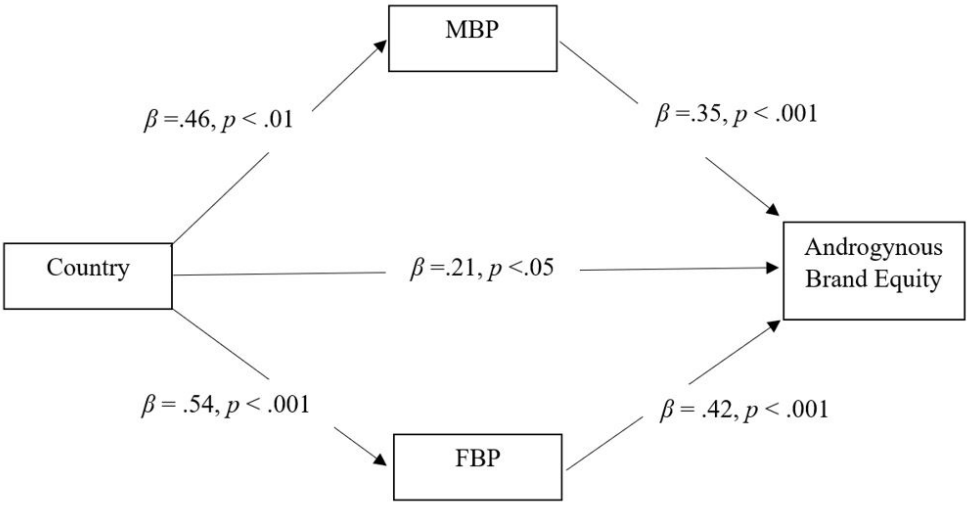

Figure 3. Mediating effect of MBP and FBP on androgynous brand equity (Study 1)

270x148mm (96 x 96 DPI)

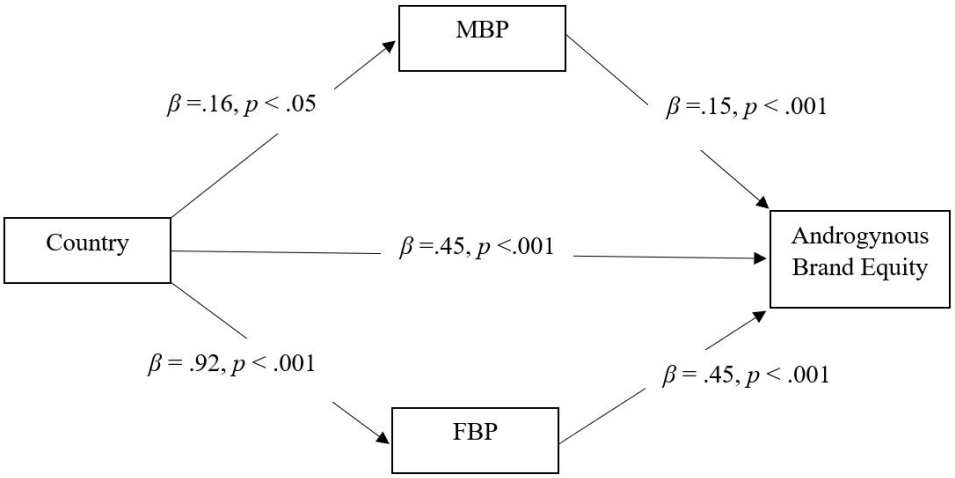

Figure 4. Mediating effect of MBP and FBP on androgynous brand equity (Study 2)

300x156mm (96 x 96 DPI)

	Construct	Mean	Standard Deviation	Cronbach's *a*	Loading range	AVE
Study 1	MBP masculine	5.18	0.88	0.71	0.85-0.91	0.77
	FBP masculine	2.98	1.38	0.89	0.74-0.91	0.75
	Brand equity masculine	4.72	1.06	0.84	0.80-0.87	0.68
	MBP feminine	3.39	1.23	0.70	0.69-0.84	0.62
	FBP feminine	5.05	0.80	0.81	0.68-0.85	0.62
	Brand equity feminine	4.92	1.02	0.85	0.77-0.86	0.69
	MBP androgynous	4.48	1.05	0.71	0.58-0.90	0.64
	FBP androgynous	3.82	1.20	0.75	0.68-0.83	0.57
	Brand equity androgynous	4.73	1.10	0.88	0.79-0.89	0.74
Study 2	MBP masculine	4.58	0.96	0.75	0.63-0.83	0.54
	FBP masculine	3.46	1.24	0.77	0.56-0.87	0.62
	Brand equity masculine	4.59	1.27	0.91	0.88-0.93	0.81
	MBP feminine	3.48	1.31	0.74	0.86-0.92	0.79
	FBP feminine	4.23	1.11	0.85	0.89-0.93	0.87
	Brand equity feminine	4.68	1.24	0.88	0.75-0.89	0.73
	MBP androgynous	4.16	1.27	0.78	0.70-0.94	0.69
	FBP androgynous	3.98	1.36	0.72	0.58-0.81	0.55
	Brand equity androgynous	5.01	1.19	0.77	0.64-0.88	0.59

Note: *MBP = masculine brand personality*
FBP = feminine brand personality

Table 1. *Descriptive statistics of brand gender*