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Power distance belief and brand personality evaluations☆

Xuehua Wang[a,*], Xiaoyu Wang[b], Xiang Fang[c], Qingyun Jiang[d]

[a] Asia Europe Business School, Faculty of Economics and Management, East China Normal University, Shanghai 200241, China
[b] Department of Marketing, School of International Business Administration, Shanghai University of Finance and Economics, Shanghai 200433, China
[c] Department of Marketing and International Business, Spears School of Business, Oklahoma State University, Stillwater, Oklahoma 74078-4011, USA
[d] Department of Marketing, School of Management, Fudan University, Shanghai 200433, China

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ABSTRACT

This article explores the influence of power distance belief (PDB) on the evaluations of brand personality traits. It proposes that high PDB polarizes the brand personality evaluations of ingroup and outgroup brands. Specifically, results show that individuals with high PDB tend to evaluate an ingroup brand more positively and an outgroup brand more negatively than those with low PDB do. More importantly, brand social categorization tendency mediates the effect of PDB on brand personality evaluations of ingroup and outgroup brands. Furthermore, we find that temporal distance (near vs. distant buying conditions) moderates the effect of PDB on brand personality evaluations. Theoretical contributions and managerial implications are also discussed.

1. Introduction

Brand personality refers to "the set of human characteristics associated with a brand" (Aaker, 1997, p. 347). Brands, as consumption symbols, not only can help consumers express their various self-concepts but also can represent the values and beliefs of a culture. For example, Aaker, Benet-Martínez, and Garolera (2001) find that Japan and the United States share a certain set of brand personality dimensions, including sincerity, excitement, competence, and sophistication, but also have culture-specific Japanese (peacefulness) and American (ruggedness) dimensions. By asking consumers to rate a set of global brands on the same personality attributes in Korea and the United States, Sung and Tinkham (2005) identify six common brand personality traits (i.e., likeableness, trendiness, competence, sophistication, traditionalism, and ruggedness). More importantly, they also find two culture-specific attributes (i.e., passive likeableness and ascendancy) in Korea and two unique attributes (white collar and androgyny) in the United States, indicating that cultural meaning is embedded in brand personality structure. Indeed, cultural values and beliefs change consumer brand personality perceptions. It is thus desirable and important to examine how cultural beliefs influence evaluations of brand personality.

Traditionally, cross-cultural researchers have studied extensively the influence of individualism/collectivism (or independent/interdependent self-construal at the individual level) on brand meanings (e.g., Wong & Ahuvia, 1998). For example, Escalas and Bettman (2005) observe that all consumers have high self-brand connections for ingroup brands, but for outgroup brands, independents have lower self-brand connections than interdependents do. However, limited research attention has been paid to power distance belief (PDB), the first cultural dimension studied by Hofstede (2001, p. 79), and its influence on consumer perceptions and behavior. Hofstede (2001, p. 83) states that PDB refers to the extent to which people "accept and expect that power is distributed unequally" throughout society. Although within a culture and also across cultures human inequality in power, wealth, and prestige is ubiquitous in social societies, only recently has the topic of how PDB influences consumers' attitudes and behavior gradually gained attention. To date, a handful of studies have examined the effect of PDB on impulsive buying (Zhang, Winterich, & Mittal, 2010), charitable donations (Winterich & Zhang, 2011), price-quality judgments (Lalwani & Forcum, 2016), status consumption (Gao, Winterich, & Zhang, 2016; Kim & Zhang, 2014), and life insurance consumption (Chui & Kwok, 2008). Various theoretical mechanisms have been proposed to account for the effects of PDB. For example, Zhang et al. (2010) suggest that high PDB activates greater self-control, which in turn reduces impulsive buying. Winterich and Zhang (2011) argue that high PDB triggers low perceived responsibility, which leads to low charity donations. Most recently, Lalwani and Forcum (2016) show that consumers with high PDB have a higher need for structure, which results in a greater tendency to use price to judge quality.

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* Corresponding author.
E-mail addresses: mkxwang@gmail.com (X. Wang), wang.xiaoyu@mail.shufe.edu.cn (X. Wang), xiang.fang@okstate.edu (X. Fang), qyjiang@fudan.edu.cn (Q. Jiang).

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In this article, we extend the current stream of research on PDB to brand personality evaluations, and we identify a unique underlying mechanism for the effects of PDB. Specifically, we adopt the social categorization theory (Brewer & Brown, 1998; Brewer & Silver, 1978) and apply it to the context of brand society by introducing the important concept of brand social categorization tendency. We propose that individuals will categorize brands into different groups (ingroup vs. outgroup) on the basis of their own unique images or associations, just as they categorize other people into different social groups and/or hierarchical orders. Ingroup and outgroup brands serve as important reference groups that are associated with consumer self-brand connections (Escalas & Bettman, 2005).

We further argue that an individual's brand social categorization tendency will mediate the effect of PDB on brand personality evaluations. Individuals with high PDB will show a greater brand social categorization tendency, which in turn enhances their brand personality evaluations of their ingroup brands (ingroup favoritism) and lessens their evaluations of outgroup brands (outgroup negativity). Our theoretical framework offers new insights into understanding the underlying mechanism of PDB in brand personality evaluations.

2. Theoretical background

2.1. PDB and evaluations of brand personality

Brands possess important symbolic and expressive values to individuals. One important facet of the relationship between brands and human beings is brand personality attributes (Aaker et al., 2001). Brand personality is a multidimensional and multifaceted construct. It varies across cultures, primarily because individuals differ in terms of expressing their needs, wants, and self-views (Kim & Markus, 1999; Sweeney & Brandon, 2006). For instance, although Japan and the United States are found to share a certain set of brand personality dimensions, including sincerity, excitement, competence, and sophistication, they also have culture-specific Japanese dimensions (e.g., peacefulness) and American dimensions (e.g., ruggedness) (Aaker et al., 2001). In another cross-cultural study, Chu and Sung (2011) find that in China, three brand personality dimensions (competence, excitement, and sophistication) are consistent with those found in the U.S., whereas three other dimensions (traditionalism, joyfulness, and trendiness) carry culture-specific meaning that is uniquely associated with Chinese culture, due to “the coexistence of traditional and changing cultural values in contemporary Chinese society” (p. 163).

We focus on the first cultural dimension studied by Hofstede (2001), i.e., PDB, to study how it affects people's evaluations of brand personality. Human inequality in power, wealth, and prestige exists everywhere. PDB addresses the issue of how various societies respond differently to human inequality (Randall, 1993). PDB does not capture the actual power that an individual has but instead represents the extent to which a society accepts the disparity and views it as inevitable or functional (Hofstede, 2001; Oyserman, 2006; Soares, Farhangmehr, & Shoham, 2007). Previous research points out that an individual can learn cultural beliefs and their associated thoughts and behaviors, even if he or she does not actually live in and experience that culture (Oyserman & Lee, 2007). Consumers, no matter whether they live in a high- or low-PDB culture, can learn power distance beliefs and the associated concepts. For example, in a high-PDB culture, people watch TV programs on democracy and equality in which PDB is low, and thus they learn about that association. Therefore, as Zhang et al. (2010) point out, even within the same culture there are people with high PDB and people with low PDB. For example, even though the U.S. culture overall has a relatively low PDB score (40; Hofstede, 1984), people in United States military institutions tend to accept a high degree of inequality more willingly. Because cultural or subcultural meanings reside in brands' symbolic or value-expressive functions (i.e., representations and attributes of brand personality), and those functions are important for an individual to possess in order to express him/herself (Shavitt, 1990), PDB should influence people's perceptions of a brand's personality.

2.2. Brand social categorization tendency

Brands can be classified into ingroup and outgroup brands (White & Dahl, 2007), with the concepts of ingroup and outgroup borrowed from social identity literature. An ingroup refers to a group to which an individual feels he or she belongs, whereas an outgroup is defined as a group to which an individual does not feel he or she belongs (Escalas & Bettman, 2005). According to social identity theory, people often categorize themselves on the basis of how much they are similar to or different from other groups of people (Tajfel & Turner, 1979). Social categories are represented as prototypes, which consist of fuzzy attributes such as attitudes, behaviors, and perceptions (Hogg, 2001). Prototypes make groups distinctive (i.e., ingroup similarities and outgroup differences). When a particular categorization is salient, people will categorize themselves, think, and behave in terms of the category that they belong to—that is, the ingroup. As a result, the ingroup prototype or descriptions will govern people's self-perception and behavior. Therefore, self-categorization explains ingroup identification and intergroup thoughts and behavior. As Brewer and Brown (1998, p. 579) illustrate, “The role of cognitive representations of the contact situation is a critical factor determining the outcome of intergroup interactions.”

The mere categorization of people into two social groups is sufficient to elicit intergroup discrimination (Tajfel, Billig, Bundy, & Flament, 1971). Rabbie and Horwitz (1969) find that even a chance win or loss from simply flipping a coin is sufficient to arouse ingroup-outgroup bias. Ingroup formation involves the social differentiation of people into those that are considered to be “us” and those that are acknowledged to fall outside that boundary (Allport, 1954). Because ingroups require certain boundaries or demarcations between “in” and “out,” by definition the existence of ingroups implies the existence of outgroups (Brewer, 1999). According to social identity theory (Tajfel & Turner, 1986), people's need for self-esteem induces them to favor their ingroups and devalue outgroups. Social categorization can produce within-group similarity (Doise, Deschamps, & Meyer, 1978), ingroup favoritism, and outgroup negativity (Brewer & Silver, 1978). Preferential positivity toward ingroups will result in ingroup favoritism (e.g., more rewards and helpful behavior to ingroup members) and outgroup negativity (Brewer, 1999; Sherif, 1966; Sumner, 1906; Tajfel, 1970; Tajfel et al., 1971). Ingroup love is characterized by the perceived superiority of ingroup members, loyalty to the group, and brotherhood, whereas outgroup negativity involves less positivity toward outgroup members, indifference, disdain, or even hatred (Brewer, 1999).

Prior literature suggests that, in the same vein, consumers categorize brands into ingroups and outgroups (e.g., White & Dahl, 2007), but their tendency to categorize, or the extent to which they categorize, depends on how they view the society in terms of hierarchy and structure. Brand social categorization tendency in this article is defined as the extent to which people categorize brands into different groups (i.e., ingroups and outgroups). People in high-PDB cultures are more aware of the social hierarchy differences and thus desire to move upward in the social structure so as to enhance their social identity (Abrams & Hogg, 1988). Gao et al. (2016) also find that high-PDB consumers will engage in greater status consumption to signal their social identity than do low-PDB consumers, although this effect only occurs when others' status is similar or inferior to their own. Therefore, people with high PDB expect to view unequal power distribution in a society as being inevitable and legitimate and are more aware of the differences among the various classes of the social hierarchy (Gaertner, Rust, Dovidio, Bachman, & Anastasio, 1994) and between the ingroup and the outgroup. As a result, they cognitively develop a high tendency toward categorizing social objects, such as brands, accordingly. Thus, we argue that individuals with high PDB are more cognizant of the

differences between ingroup and outgroup members and tend to regard ingroup members to be superior to outgroup members. Specifically, if high-PDB consumers view a certain brand as an ingroup brand, they are likely to rate it more positively on relevant brand personality dimensions (e.g., competence for athletic shoes). In contrast, people with low PDB should perceive and expect relatively equal power distribution in a society and thus should be less aware of the differences among social classes or between ingroup and outgroup members. Therefore, the influence of PDB on those individuals would be less effective in predicting relevant personality evaluations between ingroup and outgroup brands. In a similar vein, Lalwani and Forcum (2016) also point out that consumers with high PDB are more likely to use price to judge quality, because they have a greater need for structure than do those with low PDB. Thus, they will be more likely to discriminate between brands and rank them by using price.

In summary, on the basis of the above arguments, we propose that high-PDB individuals will show a greater brand social categorization tendency (i.e., will tend to categorize brands into ingroup and outgroup brands). The mere categorization of brands into two groups can produce ingroup favoritism and outgroup negativity (Brewer & Silver, 1978). Tajfel et al. (1971) also point out that social categorization leads to an increased perception of intergroup differences and even to discriminatory intergroup behaviors. Therefore, the stronger the brand social categorization tendency, the more positive consumers' evaluations of ingroup brands will be and the more negative their evaluations of outgroup brands will be. In other words, brand social categorization tendency should mediate the relationship between PDB and consumers' evaluations of the focal brands' personality.

The remainder of this article is organized as follows. In study 1a and study 1b, we use different samples of participants (from China and the U.S., respectively) to explore the relationship between PDB and brand personality evaluations of the ingroup and/or outgroup brands. In study 2, we introduce the concept of brand social categorization tendency as a potential mediator and examine how PDB influences brand social categorization tendency. In study 3, we provide a direct test of the mediating effect of brand social categorization tendency between PDB and brand personality evaluations. Finally, in study 4, we examine temporal distance (near vs. distant buying conditions) as a moderator between PDB and brand personality evaluations (see fig. 1).

3. Study 1a: PDB and brand personality evaluations in China

The goal of this study was to explore the relationship between PDB and brand personality evaluations in China.

3.1. Participants and procedure

The sample consisted of 926 coffee consumers in three major Mainland China cities (Shanghai, Shenzhen, and Guangzhou). Of the sample, 49.80% were female, with an average age of 27 and a mean personal income of RMB4500 (approximately US$700) per month. The participants had a median education of four years of college. The respondents were recruited by using street intercepts, and they participated in the survey in exchange for RMB30 (approximately US$5). The participants were instructed to think about a coffee store brand that they regularly patronized and then fill out the questionnaire measuring their power distance beliefs, brand personality evaluations, and other demographic variables.

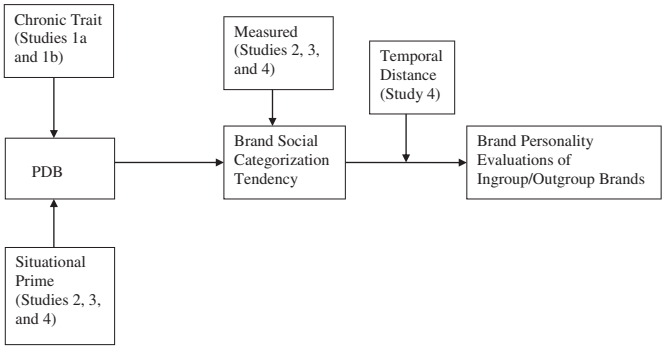

Fig. 1. Conceptual framework.

3.2. Measures

The participants' PDB level was measured by two five-point items ("Individuals can naturally accept the inequality among people" and "Individuals with low power should depend on those with high power": 1 = "strongly disagree" and 5 = "strongly agree"; $r = 0.54$). The average score of these two items was used as an index of PDB, with a high score representing high PDB. On the basis of Aaker's (1997) original brand personality scale, we chose a total of 11 items to measure five brand personality traits. Using a four-point Likert scale (1 = "not at all descriptive" and 4 = "extremely descriptive"), the participants were asked to rate the extent to which the 11 brand personality items described the specific coffee shop brand they had chosen: sincerity (down-to-earth, honest, and wholesome; $\alpha = 0.66$), excitement (spirited and up-to-date; $r = 0.45$), competence (successful and intelligent; $r = 0.45$), sophistication (upper class and charming; $r = 0.54$), and ruggedness (outdoorsy and tough; $r = 0.44$). We averaged the scores for each brand personality trait; higher scores indicated evaluations of brand personality that were more positive.

3.3. Results and discussion

We conducted a series of regression analyses with each of the brand personality traits as the dependent variable, PDB as the independent variable, and demographic variables (age, gender, income, and education) as the control variables. The results indicated that PDB exerted a significantly positive influence on each of the brand personality traits (sincerity: $\beta = 0.11$, $t = 3.43$, $p = 0.001$; excitement: $\beta = 0.15$, $t = 4.45$, $p < 0.001$; competence: $\beta = 0.10$, $t = 3.09$, $p = 0.002$; sophistication: $\beta = 0.14$, $t = 4.31$, $p < 0.001$; and ruggedness: $\beta = 0.16$, $t = 4.83$, $p < 0.001$), after controlling for the effects of demographic variables. Thus, PDB has a significantly positive association with brand personality evaluations. Note that the coffee shop brands the participants were asked to evaluate were the ones they regularly patronized, which were likely to be their ingroup brands. Therefore, the result of this study suggests that PDB may elicit greater ingroup favoritism.

Although it provides initial evidence for our proposition, study 1a is still exploratory in nature. In study 1b, we attempt to address the following issues: First, study 1a was conducted in a high-PDB culture (i.e., China). To test the robustness of its finding, we conducted study 1b using a different sample from a low-PDB culture (i.e., the United States) in a different product category (athletic shoes). Second, we asked the participants to evaluate their ingroup brands and outgroup brands directly. Third, we also measured the participants' importance ratings of five brand personality traits in their purchase, and that result provides more insight into whether PDB has the same effect on all five of the brand personality traits. Finally, we included a measure of individualism/collectivism as a potential confounding variable.

4. Study 1b: PDB and brand personality evaluations in the U.S.

4.1. Participants and procedure

A total of 300 participants were recruited from a Midwestern university in the United States (150 undergraduate students, 50.7% female) and from Amazon M-Turk (150 adult Americans, 52.7% female). Both the student sample and the more diverse nonstudent sample (i.e.,

the M-Turk sample) were used to enhance external validity; furthermore, a larger sample size can increase statistical power. First, participants were instructed to indicate the importance of the five brand personality traits when they evaluated athletic shoe brands on a five-point Likert scale (1 = "most important" and 5 = "least important"); a higher score indicated less importance. Then they were provided with a list of 17 athletic shoe brands (e.g., Adidas, And 1, Converse, Nike, Reebok, and Puma), and all participants were asked to think of these brands as if they were individual persons and then choose one brand that belonged to their own group and that shared the same social image and characteristics (i.e., the ingroup brand). Subsequently, they were asked to rate this ingroup brand on Aaker's (1997) five brand personality traits. Then, participants were asked to choose one outgroup brand and evaluate it on the same brand personality traits. Next, participants completed the power distance belief measure. We also included the measure of individualism/collectivism as a potential confounding factor. Other measures, including demographic information, were also collected.

4.2. Measures

All of Aaker's (1997) 15 items were used to measure the five brand personality traits. Participants were asked to rate, on a seven-point Likert scale (1 = "not at all descriptive" and 7 = "extremely descriptive"), the extent to which the 15 brand personality traits described the ingroup/outgroup brand they had selected. The scores were averaged for each brand personality trait. PDB was measured using the eight-item scale developed by Zhang et al. (2010; $\alpha = 0.61$). In addition, it is possible that individualism/collectivism may influence brand personality evaluations. For example, Roth (1995) observes that in individualistic countries, it is more effective to emphasize functionality, novelty, and variety in their branding strategies than it is to use social brand images that emphasize group membership benefits. Escalas and Bettman (2005) also find that for outgroup brands, independents have lower self-brand connections than interdependents do. Therefore, individualism/collectivism was included as a potential confounding variable and measured by two items ("Group welfare is more important than individual rewards" and "Being accepted by the members of your group is very important"; $r = 0.26, p < 0.001$) adapted from Dorfman and Howell (1988).

4.3. Results and discussion

Seven participants chose more than one brand for either their ingroup or outgroup and therefore their responses were excluded from further analysis, resulting in 293 usable responses. Among the five brand personality dimensions, participants regarded competence and excitement as the two most important traits in evaluating athletic shoe brands ($M_{competence} = 2.17$; $M_{excitement} = 2.81$; $M_{ruggedness} = 2.85$; $M_{sincerity} = 3.44$; $M_{sophistication} = 3.72$).

For all ingroup brands chosen, the responses were dominated by Nike (48.7%), followed by Converse (10.5%), New Balance (10.5%), and Adidas (8.8%). For the outgroup brands, the responses were more diverse, with And 1 (14.9%) and Converse (14%) as the top two outgroup brands and with each of the other brands accounting for less than 10% of the responses.

First, to test whether PDB elicits greater differences in brand personality traits between an individual's ingroup brand and his/her outgroup brand, we computed the difference scores for each brand personality trait (ingroup − outgroup) at the individual level as the dependent variable. Next we conducted a series of regression analyses with PDB as the independent variable, individualism/collectivism as the control variable, and the difference score for each personality trait as the dependent variable. The results showed that the effect of PDB was significant for the top two most important brand personality traits (competence: $\beta = 0.12$, $t = 2.14$, $p < 0.05$; excitement: $\beta = 0.15$, $t = 2.66$, $p < 0.01$) and also for sophistication ($\beta = 0.15$, $t = 2.62$, $p < 0.01$). However, it failed to reach a significant level for ruggedness ($\beta = 0.08$, $t = 1.40$, $p > 0.10$) and sincerity ($\beta = -0.06$, $t = -1.06$, $p > 0.25$). The effect of individualism/collectivism was not significant for any of the brand personality traits (all p's > 0.15). The correlation between PDB and individualism (after reverse-coding of the collectivism items) was statistically significant but not of high magnitude ($r = -0.14, p < 0.05$). This finding is consistent with prior literature. For instance, Lam, Schaubroeck, and Aryee (2002) also find that the correlations between PDB and individualism in the U.S. and Hong Kong samples are −0.19 and −0.20, respectively. The results generally support the argument that PDB enhances the perceived differences between ingroup and outgroup brands for the important brand personality traits, even after controlling for the effect of individualism/collectivism. Because individualism/collectivism does not have any impact on brand personality evaluations, we will focus on PDB in the following analyses.

A follow-up question is whether such differences between ingroup and outgroup brands result from more favoritism toward the ingroup brand, greater negativity toward the outgroup brand, or both. To answer this question, we conducted a series of regression analyses with PDB as the independent variable and each brand personality trait for the ingroup brand or outgroup brand as the dependent variable. For the ingroup brand, PDB had a significantly positive impact on sophistication ($\beta = 0.13$, $t = 2.39$, $p < 0.05$). Although the effect of PDB on other brand personality traits was not significant (competence: $\beta = 0.05$, $t = 0.95$, $p < 0.35$; excitement: $\beta = 0.07$, $t = 1.26$, $p < 0.25$; ruggedness: $\beta = 0.02$, $t = 0.37$, $p > 0.71$; sincerity: $\beta = -0.06$, $t = -1.08$, $p > 0.25$), most of the effects were in the positive direction, as expected. For the outgroup brand, PDB had a significantly negative impact on both excitement ($\beta = -0.15$, $t = -2.59$, $p < 0.05$) and competence ($\beta = -0.11$, $t = -1.83$, $p < 0.07$, marginal). Although the effect of PDB on other brand personality traits was not significant (sophistication: $\beta = -0.08$, $t = -1.37, p < 0.18$; ruggedness: $\beta = -0.09, t = -1.58, p < 0.12$; sincerity: $\beta = 0.02$, $t = 0.29$, $p > 0.78$), most associations were negative, as expected.

The above findings provide some support for ingroup favoritism and outgroup negativity, both of which are affected by PDB. It is noteworthy that different individuals have their own ingroup brands and outgroup brands. For example, one individual may consider Nike as his/her ingroup brand, whereas another individual may view it as an outgroup brand. The above analyses focused on the differences between ingroup brands and outgroup brands as a whole. To test whether the patterns can be found at the individual brand level, we conducted further analyses.

According to the responses on ingroup brands and outgroup brands, Nike was the top ingroup brand (49%) and And 1 was the top outgroup brand (15%). Out of the 293 responses, 27 participants selected both Nike as their ingroup brand and And 1 as their outgroup brand. Among this subsample, competence and excitement were considered to be the most important dimensions of the five brand personality traits for evaluating the athletic shoe category ($M_{competence} = 2.30$; $M_{excitement} = 2.44$; $M_{ruggedness} = 3.00$; $M_{sophistication} = 3.15$; $M_{sincerity} = 4.11$), which is consistent with the trait ranking in the whole sample. We conducted a series of regression analyses on this subsample. Specifically, for the differences in personality traits between the ingroup brand Nike and the outgroup brand And 1, the effect of PDB was significant for excitement ($\beta = 0.50$, $t = 2.91$, $p = 0.007$), competence ($\beta = 0.48$, $t = 2.73$, $p = 0.01$), and ruggedness ($\beta = 0.37$, $t = 2.00$, $p < 0.06$, marginal), but was not significant for sincerity and sophistication (both p's > 0.10). For the ingroup brand Nike, PDB had no significant effect on brand personality traits (all p's > 0.10). This may be because the sample size was too small to reach statistical significance. However, for the outgroup brand And 1, the effect of PDB was significantly negative for all five traits (excitement: $\beta = -0.54$, $t = -3.24$, $p = 0.003$; competence: $\beta = -0.48$,

$t = -2.76$, $p = 0.01$; sophistication: $\beta = -0.59$, $t = -3.62$, $p = 0.001$; sincerity: $\beta = -0.41$, $t = -2.25$, $p = 0.03$; ruggedness: $\beta = -0.36$, $t = -1.92$, $p < 0.07$, marginal), which indicates a strong negativity toward the outgroup brand. The patterns at the specific brand level were generally consistent with the findings when we treated all ingroup and outgroup brands as a whole.

The above two studies across both the high and low PDB cultures offer strong evidence that PDB can influence brand personality evaluations. More specifically, study 1a demonstrated that PDB might elicit greater favoritism toward ingroup brands. Study 1b showed that high PDB enhances the differences in brand personality evaluations between ingroup and outgroup brands. These differences were further supported by the slight favoritism toward the ingroup brands and the strong negativity toward the outgroup brands. Study 1b also showed that individualism/collectivism failed to influence brand personality evaluations, which rules out its potential confounding effect. It is noteworthy that in study 1b, the effect of PDB seemed to be more pronounced and consistent for the important brand personality traits (i.e., excitement and competence) than for other less important traits, as indicated by the results across both the whole sample and the subsample. According to the theory of accessibility, if a trait associated with the information at hand is accessible, then people are more likely to interpret the incoming information in terms of that trait (Higgins, 1996). The most important brand personality trait for evaluating a product category should be more readily accessible than other traits, and therefore consumers will be more likely to use this trait (compared with other traits) for brand personality evaluation. For example, in their article, Johar, Sengupta, and Aaker (2005) focused on one brand personality trait in each of their experiments: sophistication for clothing (experiment 1) and excitement for travel agencies (experiment 2). Therefore, we focused on the most important brand personality trait within a product category in our subsequent studies.

Because studies 1a and 1b measured PDB, the positive relationship between PDB and brand personality evaluations is still correlational instead of causal. In the subsequent studies, we primed PDB to establish causality and also introduced brand social categorization tendency as the underlying mechanism that accounted for the relationship between PDB and brand personality evaluations.

5. Study 2: PDB and brand social categorization tendency

People can learn the associations between cultural beliefs and related concepts, such as brand social categorization tendency. When a certain cultural belief is activated, the associated knowledge can become salient. Therefore, when high PDB is primed, a stronger brand social categorization tendency should also be activated, whereas when low PDB is activated, the consumers' brand social categorization tendency should be less accessible. In study 2, we attempted to test whether higher PDB would trigger a greater brand social categorization tendency. We adapted Gaertner et al.' (1994) social categorization scale to measure brand social categorization tendency. We hypothesize as follows:

H1. Consumers with high PDB will display greater brand social categorization tendency than will those with low PDB.

5.1. Procedure and measures

A total of 64 undergraduate students from a Mainland China university participated in this study. They first completed the PDB priming technique and then performed an ingroup and outgroup task, followed by the measures of perceived overall difference between ingroup and outgroup brands and brand social categorization tendency. Finally, we also measured the participants' familiarity with the product category (a seven-point item, ranging from “not at all familiar” to “very familiar”), their product category knowledge (a seven-point item, ranging from “not at all knowledgeable” to “very knowledgeable”), and their mood state (a seven-point item, ranging from “very bad” to “very good”). Some demographic measures, such as gender and income, were also collected.

5.2. PDB priming

Following the method used by Zhang et al. (2010), the participants first performed a sentence completion task. They were asked to form meaningful sentences from scrambled words. In either the high or low PDB condition, they completed three sentences associated with social hierarchy (or equality). Then, the participants were asked to summarize the main point, on the basis of the completed sentences, and to list one reason to support the statement (social hierarchy/equality) in the high- (or low-) PDB condition. Subsequently, they responded to two manipulation check questions: “For the time being, I mainly think that …” and “At this moment, I feel that …” (Zhang et al., 2010) on a seven-point scale (1 = “social hierarchy is important” and 7 = “social equality is important”; $r = 0.77$); a lower score indicated higher PDB.

5.3. Ingroup versus outgroup task

The participants were given 10 brands in the athletic shoes category (e.g., Nike, Adidas, Kappa, Puma, LiNing, Anta, and XTEP) and asked to imagine each brand as a person. They were asked to write down the brands that they thought were ingroup members, those that they thought were outgroup members, and the brands whose group membership they were unsure about. Next, they indicated the extent to which they perceived the overall difference between ingroup and outgroup brands on a seven-point scale (1 = “extremely small” and 7 = “extremely large”).

5.4. Brand social categorization tendency

We measured brand social categorization by adapting Gaertner et al.' (1994) social categorization scale (see Appendix A). The participants were instructed to imagine all of the athletic shoe brands as different persons and then respond to three questions on a seven-point scale (1 = “strongly disagree” and 7 = “strongly agree”): “Despite the different groups in the society, there is frequently the sense that these individuals are all just one group (reversed score)”; “It usually feels as though these individuals belong to different groups”; and “It usually feels as though every brand is an individual person and there is no group difference among them (reversed score).” Three items showed good reliability ($\alpha = 0.79$), and the scores were averaged to form an index for brand social categorization tendency; higher scores indicated greater brand social categorization tendency.

5.5. Mood

We also used one seven-point item (1 = “very bad” and 7 = “very good”) to measure individuals' mood states. The temporary power distance beliefs induced by the priming technique may be different from an individual's inherent beliefs and may have a negative impact on that person's mood state.

5.6. Results and discussion

We found that the participants in the high-PDB condition reported greater momentarily accessible PDB than did those in the low-PDB condition ($M_{high} = 3.14$, $M_{low} = 6.00$; $F(1, 62) = 144.53$, $p < 0.001$), thus indicating the effectiveness of PDB priming.

In Hypothesis 1, we proposed that consumers with high PDB display a greater brand social categorization tendency than do those with a low PDB. Since none of the covariates, such as demographic variables and brand familiarity/knowledge, was significant, we conducted a one-way

ANOVA. The results showed that PDB had a significant effect on brand social categorization tendency ($F(1, 62) = 52.33$, $p < 0.001$). Consistent with the prediction of Hypothesis 1, individuals with high PDB had a greater brand social categorization tendency than did those with low PDB ($M_{high} = 5.40$, $M_{low} = 3.48$). Furthermore, compared with the individuals in the low-PDB condition, those in the high-PDB condition perceived a greater overall difference between ingroup and outgroup brands ($M_{high} = 5.84$, $M_{low} = 4.31$; $F(1, 62) = 20.57$, $p < 0.001$).

The PDB prime did not influence the participants' mood states ($M_{high} = 4.03$, $M_{low} = 4.10$; $F < 1$). When mood was included as a covariate in the model, the results remained unchanged and mood was not significant ($F < 1$, $p > 0.70$). Therefore, mood is not a viable alternative explanation for our findings.

We found that high PDB indeed activates a greater level of brand social categorization tendency, thus supporting H1. In addition, results revealed that the participants with high PDB perceived a greater overall difference between the ingroup brands and the outgroup brands than those with low PDB did. However, the difference was measured as a global evaluation at the group level (i.e., the ingroup brands vs. the outgroup brands as a whole). A more important question is whether such a difference exists at the individual brand level (an ingroup brand vs. an outgroup brand) for brand personality evaluations. Furthermore, if the difference at the individual level indeed exists, is the greater difference due to the positive impact of PDB on the ingroup brand (ingroup favoritism, as found in study 1a) or to the negative effect on the outgroup brand (outgroup negativity, as found in study 1b), or to both? Studies 1a and 1b provided some initial evidence. In study 3, we manipulated PDB to test its causal effect on ingroup and outgroup brand personality evaluations and included brand social categorization tendency as a mediator.

6. Study 3: the mediating role of brand social categorization tendency

Study 2 showed that priming PDB can elicit accessibility to brand social categorization tendency, which will affect evaluations of brand personality. That is because social categorization tendency produces ingroup favoritism and outgroup negativity (Doise et al., 1978), thus polarizing brand personality evaluations for ingroup versus outgroup brands. Accordingly, we hypothesize as follows:

H2. Consumers with high PDB will perceive a greater difference in brand personality evaluations between an ingroup brand and an outgroup brand than will those with low PDB.

H3a. Consumers with high PDB will have more positive brand personality evaluations of an ingroup brand than will those with low PDB.

H3b. Consumers with high PDB will have more negative brand personality evaluations of an outgroup brand than will those with low PDB.

H4. Brand social categorization tendency mediates the effect of PDB on the difference between ingroup and outgroup brand personality evaluations.

6.1. Pretests

Pretest results (n = 54 Chinese college students) indicated that among the 10 major brands in the athletic shoes category, Adidas was perceived as an ingroup brand by 72.2% of the participants and XTEP was regarded as an outgroup brand by 50%. Therefore, we chose Adidas and XTEP as our target brands in study 3. In addition, we conducted another pretest to find the most important brand personality dimension for evaluating sportswear brands. A total of 42 Chinese university students participated in the pretest. They were asked to rank order the importance of the five brand personality dimensions in evaluating athletic shoe brands (1 = "very important" and 5 = "very unimportant"). The results showed that competence was ranked as the most important trait (2.41); other dimensions ranged from 2.56 to 4.13. Therefore, in this study, we focused only on the competence trait as the main dependent variable.

6.2. Design and procedure

This study employed a 2 (PDB: high vs. low) × 2 (ingroup vs. outgroup brand) mixed design, with PDB as a between-subject variable and ingroup/outgroup as a within-subject variable. After prescreening, 63 Chinese undergraduate students who regarded Adidas as the ingroup brand and XTEP as the outgroup brand were randomly assigned to the high- and low-PDB conditions. We used the same procedure as in the previous studies to prime PDB. After the participants had completed the PDB priming task, they were asked to imagine Adidas and XTEP as two individuals and evaluate their brand personality trait "competence," which was measured by three seven-point items (reliable, intelligent, and successful; $\alpha = 0.78$ and 0.88 for Adidas and Xtep, respectively; Aaker, 1997). Then, they completed the brand social categorization tendency measures ($\alpha = 0.72$).

6.3. Results and discussion

Results showed that participants in the high-PDB condition reported greater momentarily accessible PDB than did those in the low-PDB condition ($M_{high} = 2.91$, $M_{low} = 6.24$; $F(1, 61) = 186.99$, $p < 0.001$), thus indicating that the PDB priming was successful.

To test Hypothesis 2, we conducted a one-way ANOVA with PDB as the independent variable. The dependent variable was the difference score in competence evaluation between the ingroup brand (Adidas) and the outgroup brand (XTEP) for each participant. The result showed that PDB had a significant main effect ($F(1, 61) = 14.72$, $p < 0.001$). Specifically, compared with the individuals with low PDB, those with high PDB perceived a greater ingroup/outgroup difference ($M_{high} = 2.26$, $M_{low} = 1.08$), thereby supporting Hypothesis 2.

To test Hypotheses 3a and 3b, we conducted a repeated measure ANOVA with PDB as the independent variable and the repeated measure of ingroup and outgroup brand competence evaluations as the dependent variables. The result revealed a significant main effect of ingroup/outgroup brands ($M_{ingroup} = 5.12$, $M_{outgroup} = 3.44$; $F(1, 61) = 116.61$, $p < 0.001$), suggesting that the participants rated the ingroup brand (Adidas) more positively than the outgroup brand (XTEP). Moreover, this main effect was qualified by a significant interaction of PDB and ingroup/outgroup ($F(1, 61) = 14.72$, $p < 0.01$). Specifically, in line with Hypothesis 3a, compared with the individuals in the low-PDB condition, those in the high-PDB condition evaluated the ingroup brand more positively on the competence dimension ($M_{high} = 5.45$, $M_{low} = 4.77$; $F(1, 61) = 11.08$, $p = 0.001$). In contrast, compared with the participants in the low-PDB condition, those in the high-PDB condition evaluated XTEP more negatively ($M_{high} = 3.19$, $M_{low} = 3.70$; $F(1, 61) = 3.94$, $p = 0.05$), thereby supporting Hypothesis 3b.

We also ran a one-way ANOVA with PDB as the independent variable and brand social categorization tendency as the dependent variable. The result indicated that brand social categorization tendency was greater for the participants in the high-PDB condition than for those in the low-PDB condition ($M_{high} = 5.83$, $M_{low} = 4.29$; $F(1, 61) = 68.72$, $p < 0.001$), thus supporting Hypothesis 1.

To test Hypothesis 4, which proposes that brand social categorization tendency mediates the effect of PDB on the ingroup and outgroup difference in brand personality evaluations (i.e., the competence dimension), we conducted a series of regression analyses with PDB as the independent variable (Baron & Kenny, 1986). First, PDB significantly influenced both brand social categorization ($\beta = 0.73$, $t = 8.29$, $p < 0.001$) and the ingroup/outgroup difference ($\beta = 0.44$, $t = 3.84$,

$p < 0.001$). Second, brand social categorization tendency was a significant predictor of the ingroup/outgroup difference ($\beta = 0.51$, $t = 4.59$, $p < 0.001$). Finally, when both PDB and brand social categorization tendency were included as predictors of the ingroup/outgroup difference, the effect of PDB became nonsignificant, dropping to $\beta = 0.15$, $t = 0.95$, $p > 0.30$, and brand social categorization tendency was still significant ($\beta = 40$, $t = 2.46$, $p < 0.02$). The Sobel test showed that the mediation of PDB was significant ($z = 2.35$, $p < 0.02$). In addition, we followed a bootstrapping procedure (Zhao, Lynch, & Chen, 2010) to test the significance of the indirect (i.e., mediation) effect. We performed 5000 bootstrap resamples using Hayes' (2012) PROCESS for SPSS, and we obtained 95% bias-corrected bootstrap confidence intervals. The results showed that the upper and lower confidence intervals did not include zero (0.2299 to 1.4694), thus indicating that the mediation was significant. Therefore, Hypothesis 4 was supported.

The results from study 3 offer further evidence of the association between PDB and brand social categorization tendency, as well as of the mediating role of brand social categorization tendency. To enhance the generalizability of our results, in study 4 we used another product category to investigate the relationship between PDB and brand personality evaluations and the moderating effect of temporal distance.

7. Study 4: the moderating effect of temporal distance

Our previous studies show that consumers with high PDB tend to categorize brands more than those with low PDB do, and that tendency polarizes their evaluations of ingroup versus outgroup brands. Therefore, for high-PDB consumers, when brand social categorization tendency is reduced, the ingroup/outgroup difference in brand personality evaluations should become smaller. One possible variable that could influence an individual's general categorization process is temporal distance (near vs. distant). According to the construal level theory (CLT), abstraction is involved in people's mental construal, and temporal distance is considered to be one of the important factors that influence abstraction level (Trope & Liberman, 2000). People use abstract and high-level construals to represent distant events and detailed low-level construals to represent near events (Trope, Liberman, & Wakslak, 2007). Abstract construals are described as being general, schematic, and decontextualized (Kim, Zhang, & Li, 2008). Temporal distance is closely relevant to our investigated relationships between PDB, brand social categorization tendency, and brand personality evaluations. Liberman, Sagristano, and Trope (2002) provide experimental evidence that participants create fewer groups (i.e., they have a smaller object categorization tendency) out of assigned objects in a distant future condition than they do in a near future condition, because participants thinking about events that would occur in the distant future consider the objects in more superordinate and abstract terms. In a similar vein, we argue that temporal distance can also influence an individual's brand social categorization tendency. In the near buying condition, concrete construals are contextualized, and consumers will perceive greater ingroup/outgroup brand differences. In contrast, in the distant buying condition people use abstract and high-level construals to make judgments, and thus they will perceive less difference between ingroup and outgroup brands.

Therefore, we argue that temporal distance moderates the effect of PDB on brand personality evaluations. However, such a moderating effect may not be so evident for low-PDB consumers, because their difference perceptions between ingroup and outgroup brand personality are already low (the floor effect), whether for a near or distant buying decision. In addition, we propose that brand social categorization tendency mediates the effect of PDB and temporal distance on brand personality evaluations. Thus, we hypothesize as follows:

H5. Temporal distance moderates the effect of PDB on the difference between ingroup and outgroup brand personality evaluations. Specifically, for a near buying decision, consumers with high PDB show greater difference perceptions than do those with low PDB. However, for a distant buying decision, no significant difference exists.

H6a. In the near buying condition, consumers with high PDB will have more positive brand personality evaluations of an ingroup brand than will those with low PDB. However, in the distant buying condition, no significant difference exists.

H6b. In the near buying condition, consumers with high PDB will have more negative brand personality evaluations of an outgroup brand than will those with low PDB. However, in the distant buying condition, no significant difference exists.

H7. Brand social categorization tendency mediates the effect of PDB and temporal distance on the difference between ingroup and outgroup brand personality evaluations.

7.1. Participants, design, and procedure

To enhance the generalizability of our findings, we chose a different product category, jeans, for this study. We conducted a pretest with 36 Chinese university students and found that sophistication ($M = 2.22$ on a five-point scale) was considered to be the most important brand personality trait for individuals in evaluating jeans products. In the pretest, we also found that participants chose Levi's as an ingroup brand (61.1%) and Jeanswest (an Australian brand) as an outgroup brand (30.6%). Thus, in our main study, we included a screening question to identify the participants who chose Levi's as their ingroup brand and Jeanswest as their outgroup brand. A total of 120 students from a large Chinese university met that criterion. This study employed a 2 (PDB: high vs. low) × 2 (temporal distance: near vs. distant purchasing situation) × 2 (ingroup vs. outgroup brand) mixed design with PDB and temporal construal as two between-subject variables and ingroup/outgroup brand as the within-subject variable. After the participants had completed the PDB prime, they were asked to imagine that they were going to buy a pair of jeans either tomorrow (near temporal condition) or one year from now (distant temporal condition). Then, they rated the brand personality scale of Levi's and Jeanswest (two seven-point items for sophistication: upper class and charming; $r = 0.45$ and 0.81, respectively). Finally, their brand social categorization tendency was measured.

7.2. Results and discussion

We conducted a two-way ANOVA with PDB and temporal construal as the independent variables. Results showed only a significant main effect of PDB ($F(1, 116) = 101.48$, $p < 0.001$). Participants in the high-PDB condition had greater momentarily accessible PDB ($M_{high} = 3.60$, $M_{low} = 5.79$) than did those in the low-PDB condition. No main effect of temporal construal or the interaction effect was significant (both $F < 1$), thus indicating that our manipulation of PDB was successful.

To test Hypothesis 5, we computed the difference score in the sophistication trait between the ingroup brand (Levi's) and the outgroup brand (Jeanswest) for each individual and ran a two-way ANOVA on the difference score. The result showed significant main effects of PDB ($F(1, 116) = 24.24$, $p < 0.001$) and temporal distance ($F(1, 116) = 10.21$, $p = 0.002$), qualified by a significant interaction effect ($F(1, 116) = 30.56$, $p < 0.001$). The planned comparisons indicated that in the near buying condition, participants in the high-PDB condition perceived the difference between ingroup and outgroup brand personality evaluations as being significantly larger ($M_{high} = 2.87$, $M_{low} = 0.85$; $F(1, 116) = 54.61$, $p < 0.001$; see fig. 2) than did the participants in the low-PDB condition. However, no significant difference was found in the distant buying condition ($M_{high} = 1.18$, $M_{low} = 1.30$; $F < 1$). Therefore, Hypothesis 5 was supported.

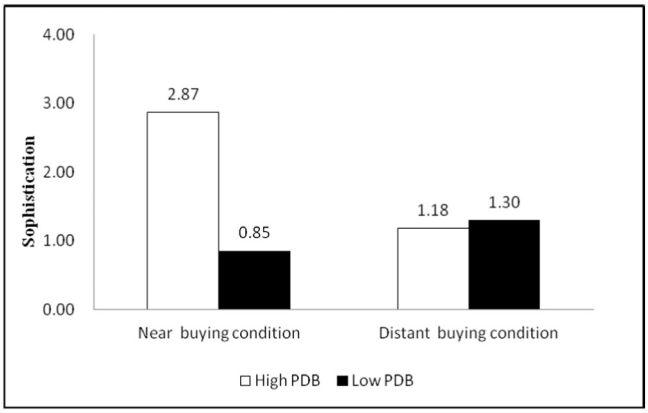

Fig. 2. Study 4: Brand personality evaluation by temporal distance.

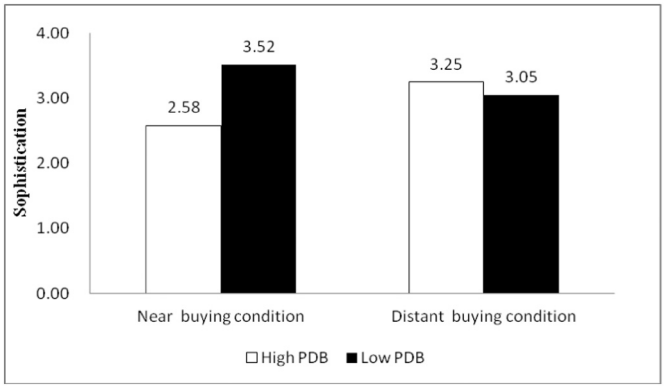

Fig. 4. Study 4: Brand personality evaluation by temporal distance for an outgroup brand.

To test Hypotheses 6a and 6b, we conducted a repeated measure ANOVA with PDB and temporal construal as the independent variables, and the repeated measure of ingroup and outgroup brand sophistication evaluations as the dependent variables. The result revealed a significant main effect of ingroup/outgroup brands ($M_{ingroup} = 4.65$, $M_{outgroup} = 3.10$; $F(1, 116) = 258.08$, $p < 0.001$), significant two-way interaction effects of PDB and ingroup/outgroup ($F(1, 116) = 24.24$, $p < 0.001$) and temporal construal and ingroup/outgroup ($F(1, 116) = 10.21$, $p < 0.05$), and a significant three-way interaction of PDB, temporal construal, and ingroup/outgroup brands ($F(1, 116) = 30.56$, $p < 0.001$). To test the significant three-way interaction, we conducted separate two-way ANOVAs on the ingroup brand (Levi's) and the outgroup brand (Jeanswest), respectively. For the ingroup brand, the ANOVA results showed significant main effects of PDB ($F(1, 116) = 15.88$, $p < 0.001$) and temporal construal ($F(1, 116) = 12.46$, $p < 0.05$), qualified by a significant interaction effect ($F(1, 116) = 11.67$, $p < 0.05$). Specifically, the planned comparisons indicated that in the near buying condition, the participants in the high-PDB condition evaluated the ingroup brand more positively on the sophistication dimension than those in the low-PDB condition did ($M_{high} = 5.45$, $M_{low} = 4.37$; $F(1, 116) = 27.38$, $p < 0.001$; see fig. 3). However, no significant difference was found in the distant buying condition ($M_{high} = 4.43$, $M_{low} = 4.35$; $F < 1$). Therefore, Hypothesis 6a was supported.

For the outgroup brand, the ANOVA results showed a significant interaction effect of PDB and temporal construal ($F(1, 116) = 8.20$, $p < 0.05$). The planned comparisons indicated that in the near buying condition, the participants in the high-PDB condition evaluated the outgroup brand more negatively than the participants in the low-PDB condition did ($M_{high} = 2.58$, $M_{low} = 3.52$; $F(1, 116) = 11.12$, $p = 0.001$; see fig. 4). However, no significant difference was found in the distant buying condition ($M_{high} = 3.25$, $M_{low} = 3.05$; $F < 1$). Therefore, Hypothesis 6b was supported.

To test Hypothesis 7, we conducted a series of regression analyses. In step 1, we estimated a regression with PDB, temporal construal, and the two-way interaction as the independent variables and the ingroup/outgroup difference as the dependent variable. The result showed a significant interaction effect of PDB and temporal construal ($\beta = -0.71$, $t = -5.53$, $p < 0.001$). In step 2, we conducted a similar regression analysis on the mediating variable, brand social categorization tendency, and found a significant interaction effect ($\beta = -0.36$, $t = -2.35$, $p < 0.05$). In step 3, brand social categorization tendency significantly predicted the ingroup/outgroup difference ($\beta = 0.43$, $t = 5.10$, $p < 0.001$). Finally, in step 4, when PDB, temporal construal, the two-way interaction of PDB and temporal construal, and the mediating variable brand social categorization tendency were all included in the model predicting the ingroup/outgroup difference (the dependent variable), brand social categorization tendency was still significant ($\beta = 0.30$, $t = 4.09$, $p < 0.001$), and the effect of the two-way interaction of PDB and temporal construal decreased from $\beta = -0.71$, $t = -5.53$, $p < 0.001$ to $\beta = -0.61$, $t = -4.88$, $p < 0.001$. The Sobel's Z value confirmed that the mediation by brand social categorization was significant ($Z = 2.02$, $p < 0.05$). In addition, we performed 5000 bootstrap resamples using Hayes' (2012) PROCESS on SPSS, and 95% bias-corrected bootstrap confidence intervals were obtained. Results showed that the upper and lower confidence intervals did not include zero (-0.7257 to -0.0702), thereby indicating that the partial mediation was significant. As expected, a significant interaction ($F(1, 116) = 5.52$, $p < 0.05$) indicated that when participants were in the near buying condition, those primed with high PDB showed a significantly higher social categorization tendency than did those primed with low PDB ($M_{high} = 5.03$ vs. $M_{low} = 4.18$; $F(1, 116) = 10.16$, $p < 0.01$). This difference, however, was not evident when they were in the distant buying condition ($M_{high} = 4.63$ vs. $M_{low} = 4.67$; $F < 1$). Therefore, we concluded that brand social categorization tendency partially mediated the effect of PDB and temporal construal on the ingroup/outgroup difference in brand personality evaluations, thereby supporting Hypothesis 7.

In study 4, we showed that PDB affects the difference between ingroup and outgroup brand personality evaluations only for a near buying decision. For a distant buying situation, even high PDB does not activate strong brand social categorization and therefore does not significantly influence brand personality evaluation differences. As we argued, brand personality evaluations regarding a near or distant buying decision differ in terms of their activation of brand social categorization tendencies. Thus, study 4 provided more evidence that differences in PDB result in different levels of brand social categorization tendency and subsequently influence evaluations of brand personality.

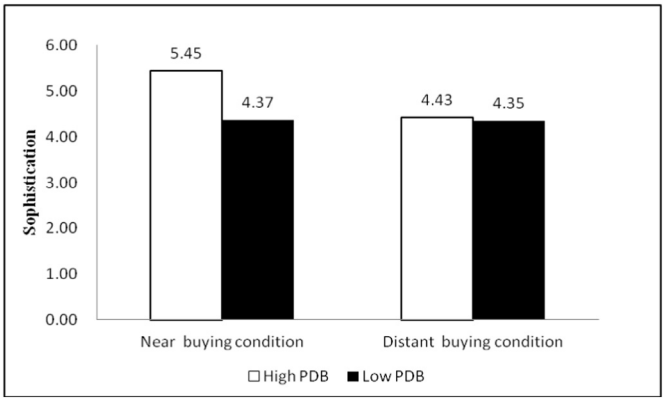

Fig. 3. Study 4: Brand personality evaluation by temporal distance for an ingroup brand.

8. General discussion

This research extends our understanding of cultural impacts on consumer behavior by investigating the influence of PDB on evaluations of brand personality. The first set of studies (1a and 1b) used cross-cultural samples and different product categories to examine whether PDB can affect evaluations of brand personality. Study 2 showed that consumers with high PDB display a greater brand social categorization tendency than those with low PDB do. Study 3 offered strong evidence that brand social categorization tendency mediates the relationship between PDB and evaluations of brand personality. In study 4, we found that the effect of PDB on evaluations of brand personality is moderated by temporal distance, such that consumers with high PDB show relatively more brand personality differences between ingroup and outgroup brands for a near buying decision than for a distant buying decision. Taken together, the results of the above studies paint a highly consistent picture. Regardless of whether PDB is operationalized as an individual trait or as an experimental manipulation, it tends to polarize the brand personality evaluations of ingroup and outgroup brands, and such an effect is mediated by an individual's brand social categorization tendency. Also, the effect is moderated by temporal distance, which influences an individual's categorization tendency. Importantly, this pattern of effects is replicated across different methods (survey and experiment), different product categories (coffee shops, athletic shoes, and jeans), and different cultures (China and the United States).

Prior studies on brand personality across cultures have mostly focused on testing the generalizability and validity of Aaker's big-five brand personality traits framework and on identifying common traits across cultures and culture-specific personality traits (Aaker et al., 2001; Sung & Tinkham, 2005). Seldom does the existing relevant research approach the issue of brand personality evaluations from a cultural-dimension perspective. This article explores how people's brand personality evaluations are affected by PDB, which is a less studied cultural dimension than is individualism/collectivism. In study 1a, we found that brand personality evaluations can be predicted by the individual level of PDB. More importantly, this finding is quite robust under a different cultural context (i.e., that of the United States), indicating that this effect exists in both Eastern and Western cultures. In addition, by showing the relationship between PDB and brand personality evaluations at an individual level, this research further confirms the idea that even within the same culture, people can exhibit different levels of PDB. Indeed, across the studies, we found a consistent pattern in brand personality traits. For example, both the U.S. (study 1b) and Chinese respondents (study 3) considered competence as the most important brand personality trait in evaluating athletic shoes. Consistent with the finding of Aaker et al. (2001), competence is a common brand personality dimension that shares similar meanings across cultures.

Several prior studies indicate that individualism is associated with low PDB and that collectivism is associated with high PDB (Hofstede, 1984; Oyserman & Lee, 2007). In study 1b, we found that PDB and individualism were moderately correlated ($r = -0.14$, $p < 0.05$), which matches those observed in previous studies. For instance, Lam et al. (2002) also find that the correlations between PDB and individualism in U.S. and Hong Kong samples are -0.19 and -0.20, respectively. More importantly, we found that the individual level of PDB influenced brand personality evaluations but the individualism/collectivism did not. This finding is consistent with Zhang et al.'s (2010) finding that impulsive buying is affected by the cultural level of PDB but not by the cultural level of individualism/collectivism. Similarly, Lalwani and Forcum (2016) find that PDB influences price-quality judgments independently of individuals' self-construal level (independent vs. interdependent). Taken together, the current study highlights the importance of moving beyond the cultural dimension of individualism/collectivism and of considering PDB in cross-cultural research. Future research could explore the effects of other cultural dimensions on brand personality evaluations.

Brand social categorization tendency was found to be a novel mediator between PDB and brand personality evaluations. Social categorization can produce ingroup favoritism and outgroup negativity (Brewer & Silver, 1978), which influence people's evaluations of social objects. Although social categorization has been extensively studied in the fields of social psychology and sociology, little is known about its role in affecting people's brand evaluations. In this article, we have extended this concept to brand society and have introduced brand social categorization tendency as an individual difference variable, in that consumers tend to categorize brands into their corresponding orders in a brand society (e.g., ingroup vs. outgroup brands). We propose that individuals with high PDB will trigger a greater brand social categorization tendency, which results in larger brand personality differences between ingroup and outgroup brands. Our studies provide strong support for this proposition and establish that brand social categorization tendency plays a mediating role between PDB and brand personality evaluations, thus explaining the mechanism of how PDB affects brand personality evaluations. In study 4, we found that PDB and temporal distance jointly influence an individual's brand social categorization tendency. Across all the studies, we measured brand social categorization tendency for different product categories: athletic shoes (study 2 and study 3) and jeans (study 4). Finally, Lalwani and Forcum (2016) find that high-PDB consumers tend to use price to judge quality because they have a greater need for structure, which makes them more likely to differentiate and rank brands based upon heuristics such as the price-quality relationship. This is consistent with our findings that individuals who are high in PDB will display a stronger brand social categorization tendency.

This research also provides several important managerial implications. First, global firms can benefit from using their consumers' PDB background (particular countries or regions) or from employing PDB priming strategies to shape and/or adapt their brand personalities, because high PDB is associated with more-polarized evaluations of brand personality. Second, marketers need to understand whether consumers will make a purchase in the distant future or the near future. For instance, for fashion or seasonal products, it is easy to determine whether they will be purchased in the distant or near future. Being aware of the interaction of PDB and the possible purchase time of consumers, global managers can achieve synergy by adjusting their promotion strategies to different PDB cultures. Third, even consumers within the same culture can display a high or low level of PDB, thus creating chances for global firms to adapt their communications strategies to achieve the desired effects for different segments of consumers within the same culture. For example, advertising messages may trigger high-PDB beliefs (e.g., “for those who want to reach the top”; Lalwani & Forcum, 2016, p. 330) for those ingroup brands but may evoke equality for outgroup brands such as new brands/products (e.g., the slogan “equality has no boundaries”). Finally, in high-PDB cultures, companies can sharpen people's feelings that they are within the same group with targeted consumers, so as to achieve a greater extent of positive brand personality evaluations. For instance, companies can use brand image to show what their targeted consumers are like, thus creating an image of an ingroup brand (e.g., “The Few, the Proud, the Marines”).

Limitations in this research offer opportunities for future directions. First, product category may also influence brand social categorization tendency. Is brand social categorization tendency a relatively stable individual trait regardless of product category, or is it one that varies across product categories? Collectively, our research sheds initial light on this question. We put these datasets together and conducted a one-way ANOVA with brand social categorization tendency as the dependent variable and product category as the independent variable (we combined the datasets of study 2 and study 3 for athletic shoes). Our results showed no significant main effect of product category on brand social categorization tendency ($M_{\text{athletic shoes}} = 4.75$, $M_{\text{jeans}} = 4.84$;

$F < 1$). Note that the product categories we chose are highly conspicuous to others, and consumers are more likely to purchase them to express their self-image. Thus, participants in our studies generally demonstrated a medium-high level of brand social categorization tendency in these categories. For purely functional products or those consumed in private settings, we speculate that brand social categorization tendency may be lower. Future research can explore this possibility along the lines of public versus private products and hedonic versus utilitarian products. Further research to examine other antecedents and consequences of brand social categorization tendency is also warranted.

Another interesting point is that Chinese participants tend to view global foreign brands (e.g., Adidas and Levi's) as their ingroup brands and domestic brands (e.g., XTEP) as their outgroup brands. It is not surprising that these global brands are status symbols and consumers buy them to enhance their self-image. Does country of origin or the global-local brand concept influence the effect of PDB on consumers' evaluations of brand personality? Although our studies did not measure these constructs directly, study 1b provides some initial answers to this question. In study 1b (with U.S. participants), where both the ingroup brand (Nike) and the outgroup brand (And 1) were U.S. brands, we still found that PDB impacts the brand personality evaluations of the ingroup and outgroup brands, thus ruling out the possible effect of country of origin. Future studies can investigate this question further.

We investigated only the temporal dimension of construal level theory. It is possible that other dimensions, such as social distance, might have an effect on our results. For example, Yan and Sengupta (2011) find that when people buy for others, the price-quality relationship will be enhanced more than when they buy for themselves, because the price cue is generally more abstract. In the context of brand personality evaluations (more concrete), we argue that it is possible that when people buy for themselves (concrete construal), those with high PDB who have a high brand social categorization tendency may generate greater ingroup and outgroup differences than when they buy for others, thus affecting brand personality evaluations. This warrants further research attention.

Appendix A. Brand social categorization scale

Please imagine all brands as different persons and then respond to the following questions:

1. Despite the different groups in the society, there is frequently the sense that these individuals are all just one group. (1 to 7)[a]
2. It usually feels as though these individuals belong to different groups. (1 to 7)
3. It usually feels as though every brand is an individual person and there is no group difference among them. (1 to 7)[a]

[a] Reverse coded.

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Xuehua Wang is Associate Professor, Asia Europe Business School, Faculty of Economics and Management, East China Normal University, Shanghai, 200241, China; email: mkxwang@gmail.com; telephone: 86-21-61911362; fax: 86-21-54344958. She has published in *Journal of Service Research*, *Journal of Business Research*, *Psychology & Marketing*, among others.

Xiaoyu Wang is Associate Professor, Department of Marketing, School of International Business Administration, Shanghai University of Finance and Economics, Shanghai, 200433, China; email: wang.xiaoyu@mail.shufe.edu.cn; telephone: 86-21-65906782; fax: 86-21-65907458.

Xiang Fang is Associate Professor, Department of Marketing and International Business, Spears School of Business, Oklahoma State University, Stillwater, Oklahoma, 74078-4011 U.S.A.; email: xiang.fang@okstate.edu; telephone: 918-594-8194; fax: 918-594-8281. He has published in the *Journal of Consumer Research*, among others.

Qingyun Jiang is Professor, Department of Marketing, School of Management, Fudan University, Shanghai, 200433, China; email: qyjiang@fudan.edu.cn; telephone: 86-21-25011195; fax: 86-21-65103463.