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All That Glitters Is Not Gold: How Others' Status Influences the Effect of Power Distance Belief on Status Consumption

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> This research proposes the relationship between power distance belief (PDB) and status consumption is moderated by the salience of others and their associated status (others' status). When others' status is not superior (similar or inferior), high-PDB consumers are more likely to engage in status consumption than low-PDB consumers. However, when others' status is superior, high-PDB consumers are less likely to engage in status consumption. Both signaling effectiveness and need for status underlie the effect of PDB on status consumption. Need for status mediates the effect of PDB only when others' status is not superior, whereas signaling effectiveness mediates the effect of PDB on status consumption when others' status is superior, similar, or inferior. Compared to low-PDB consumers, high-PDB consumers perceive greater signaling effectiveness when others' status is inferior or similar, but they perceive less signaling effectiveness, and therefore engage in less status consumption, when others' status is superior. When status goods are consumed in private, and therefore not effective at signaling status, the interaction of others' status and PDB is mitigated. This research articulates the nuanced effect of PDB on status consumption depending on others' status as well as the multiple mechanisms underlying status consumption.

> *Keywords*: power distance belief, status consumption, superiors, social comparison, signaling effectiveness, need for status

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tatus consumption—the purchase of luxury or high-Diriced products in the hope that the status or social prestige of these products will confer to the owner—is a well-known consumer phenomenon (Berger and Ward 2010). Although status consumption occurs worldwide, East Asia represents 21% of the world luxury status market with Chinese, Korean, and Japanese consumers believed to be more interested in status consumption than their Western counterparts (D'Arpizio et al. 2014; Wong and Ahuvia 1998). Yet so-called keeping up with the Joneses, in which individuals consume to demonstrate their status, is prevalent among Western consumers (Hopkins and Kornienko 2004), suggesting the effect of cultural orientation on status consumption needs further examination (Dubois and Ordabayeva 2015). We seek to do so by examining the moderating role of others' status (the salience of others and their associated status more specifically) on the relationship between power distance belief (PDB), which is consumers' acceptance of power disparity in social interactions (Hofstede 2001), and status consumption.

Consistent with PDB as the cultural dimension that is most directly related to attitudes toward status differences (Aaker 2006; Hofstede 2001), research to date suggests that PDB may increase status consumption (Kim and Zhang 2014; Lalwani et al. 2014; Roth 1995). In the current research, we propose that the effect of PDB on status consumption depends on the salience of others and their associated status. We do so for two reasons. First, the relative status of others is an important driver of status consumption (Berger and Heath 2007; Ordabayeva and Chandon 2011). Second, cross-cultural literature identifies the presence of others and their associated status as a critical factor moderating the effect of PDB on management decision making (Bond et al. 1985; Brockner et al. 2001; Lian, Ferris, and Brown 2012; Oyserman 2006). Even without the physical presence of another person, the activation of others (e.g., superiors, peers, inferiors) and their corresponding status associations is likely to impact behavior (Feldman and Lynch 1988). Thus we examine the role of others' status in determining the effect of PDB on status consumption.

We theorize that when others' status is similar (equal status) or inferior (lower status), high (vs. low) PDB consumers are more likely to engage in status consumption, consistent with existing literature (Lalwani et al. 2014; Roth 1995). The greater status consumption occurs due to high-PDB consumers' chronic high need for status (Lalwani et al. 2014) and their general belief that status objects can serve as an effective status signal (Wong and Ahuvia 1998). In contrast, when others' status is superior (higher status), high (vs. low) PDB consumers become less likely to engage in status consumption because, although both high- and low-PDB consumers have a high need for status when others' status is superior, only low-PDB consumers believe status objects are effective at signaling status in this context.

THEORETICAL DEVELOPMENT

PDB, Status Consumption, and the Moderating Role of Others' Status

PDB has important implications for consumer responses, especially for those related to social hierarchy (Aaker 2006; Winterich and Zhang 2014). The central difference between high and low PDB lies neither in the actual power disparity a person experiences nor in the degree of power a person has, but rather in people's attitudes toward power disparity (Hofstede 2001; Oyserman 2006). As such, PDB impacts reactions to differences in social status (Hofstede, Hofstede, and Minkov 2010; Winterich and Zhang 2014).

Perhaps not surprising, then, PDB has been found to impact status-related consumption. For instance, in examining brand performance across countries, Roth (1995) found that brands conveying social status performed better in high (vs. low) power distance countries. Additional research indicates that consumers from high power distance cultures prefer brands with status, prestige, and luxury associations rather than standard or functional brands (Kim and Zhang 2014). Lalwani et al. (2014) found that high (vs. low) PDB consumers, especially those with low social status, tend to prefer premium brands over generic brands. According to this stream of research, PDB increases status consumption. However, given the acceptance of power disparity that characterizes high PDB, we seek to determine whether high (vs. low) PDB consumers are more likely to engage in status consumption regardless of the target of their social comparison. Specifically, we propose others' status influences the effect of PDB on status consumption.

Research has documented that social comparison to those of lower (Bellezza, Gino, and Keinan 2014; Shalev and Morwitz 2012), similar (Yang and Allenby 2003), or higher status (Hopkins and Kornienko 2004; Ordabayeva and Chandon 2011) can impact status consumption. We consider how the salience of these different others and their associated status impacts the effect of PDB on status consumption. As such, others' status refers to individuals and their corresponding status (i.e., inferior, similar, or superior compared to the focal consumer) that is salient in the consumer's mind under the decision context (Steckler and Rosenthal 1985). How will others' status impact the effect of PDB on status consumption?

First, let's consider the situation when others' status is not superior such as similar or inferior others. Previous literature consistently suggests that effects of PDB are particularly sensitive to the presence of superiors but not other social comparisons, so salient peers, salient inferiors, or no salient others tend to exert similar effects on PDB (Brockner et al. 2001; Hofstede et al. 2010). Further, based on the literature reviewed above suggesting PDB increases status consumption, we propose high-PDB consumers are more likely to engage in status consumption than low-PDB consumers when there is no salient other or when the salient other's status is similar or inferior.

In contrast, when others' status is superior, consumers should be aware of their relatively inferior status compared to that of their superior (Bond et al. 1985; Lian et al. 2012). For low-PDB consumers, who believe the superordinate—subordinate relationship is nothing more than a convenient arrangement and their social status should be equal to that of superiors, thinking about superiors challenges their belief that "everyone should be equal" (Hofstede et al. 2010). Under such conditions, low-PDB consumers seek to challenge the existing social arrangement by either devaluing the superior's status or enhancing their own status (Atwater et al. 2009; Kirkman et al.

2009) to make sure they can keep up with the superior on status (Javidan et al. 2006). For instance, it has been found that when facing others of higher status (superiors), low-PDB consumers become more likely to engage in status consumption as a way to indicate they are equal to these superiors (Hopkins and Kornienko 2004). Thus when others' status is superior, the lack of inequality to the superior increases low-PDB consumers' likelihood of status consumption. This theorizing is also consistent with previous research findings that upward social comparisons or inequality increases status consumption among Western consumers, who tend to have low PDB, due to their desire to "keep up with the Joneses" (Ordabayeva and Chandon 2011; Üstüner and Holt 2010).

In contrast, high-PDB consumers tend to decrease status consumption when others' status is superior. This stems from high-PDB consumers' beliefs that everyone should have a rightful and defined social place (Hofstede 2001; Oyserman 2006). Accordingly, when high-PDB consumers are of inferior status, which is the case when others' status is superior, instead of seeking to express equality through status consumption as low-PDB consumers would do, they tend to respect the existing status hierarchy and accept the inequality. For instance, research has found that high-PDB individuals accept inferior treatment from superiors and behave submissively given that they realize no action by themselves could change their inferior status to their superior (Bond et al. 1985; Lian et al. 2012). Moreover, feedback is typically a status symbol in organizations, but high-PDB individuals tend not to offer feedback to superiors, only to peers or inferiors (Atwater et al. 2009; Carl, Gupta, and Javidan 2004). In other words, when others' status is superior, high-PDB consumers believe it is impossible to change their inferior status by their own means, and thus they accept the inequality (Hofstede et al. 2010; Javidan et al. 2006). As a result of these beliefs, when others' status is superior, high-PDB consumers become less likely to engage in status consumption. This is consistent with Hofstede's (2001) argument that in the presence of a superior, high PDB individuals' tendency to enhance their status is largely diminished.

Taken together, we propose that when others' status is not superior, high-PDB consumers are more likely to engage in status consumption, consistent with past research (Lalwani et al. 2014). However, when others' status is superior, high-PDB consumers are less likely to engage in status consumption relative to low-PDB consumers. Formally,

H1: Others' status moderates the effect of PDB on status consumption. When others' status is not superior (similar, inferior, or no salient others), high-PDB consumers are more likely to engage in status consumption than low-PDB consumers. In contrast, when others' status is superior, low-PDB consumers are more likely to engage in status consumption than high-PDB consumers.

The Mediating Roles of Signaling Effectiveness and Need for Status

In addition to examining the role of others' status in moderating the effect of PDB on status consumption, we seek to further understand why PDB increases versus decreases status consumption depending on others' status. Although existing research on status consumption has largely focused on need for status as the underlying mechanism (Dubois, Rucker, and Galinsky 2012; Lalwani et al. 2014), signaling effectiveness was long emphasized by Veblen ([1899]1994). Specifically, signaling effectiveness and need for status, which are two distinct constructs, are essential in Veblen's explanations of consumers' status consumption decisions (Veblen [1899]1994). Whereas need for status refers to consumers' motivation to increase their social status (Dubois et al. 2012), signaling effectiveness refers to consumers' perception regarding the extent to which their social status can be significantly enhanced through engaging status consumption in a specific context (Veblen [1899]1994; Wang and Griskevicius 2014). Recent research suggests that perceptions regarding the effectiveness of signaling status via status consumption play an important role in status consumption, although this mechanism has not been directly tested. For example, Wang and Griskevicius (2014, study 4) suggested that salience of relationship rivals increases women's status consumption because those women are motivated to signal stronger relationship status, but this effect is depended on perceptions that displaying lavish possessions is effective in signaling status. We build on this literature, empirically testing both need for status and signaling effectiveness to provide a more comprehensive picture regarding the moderating role of others' status on the effect of PDB on status consumption.

The Role of Need for Status. Need for status has been widely used to explain consumers' status consumption decisions such that the higher need for status increases status consumption (Dubois et al. 2012; Han, Nunes, and Drèze 2010). The emphasis on social hierarchy makes social status more important and desirable for high (vs. low) PDB consumers (Erdem, Swait, and Valenzuela 2006; Hofstede 2001; Mattila 1999). As such, high (vs. low) PDB consumers tend to have a chronically stronger need for status, increasing their status consumption, especially when others' status is not superior. This proposition is consistent with Lalwani et al. (2014), who found that, in general, high-PDB consumers are motivated by a higher need for status to show higher preference for status/premium brands.

However, when others' status is superior, it triggers an upward social comparison among consumers (Festinger 1954). Then, low-PDB consumers are motivated to keep up with their superior on status and signal they are equal to their superior (Ordabayeva and Chandon 2011). As a

result, low-PDB consumers have a situational need for status that is similar to the chronic need for status of high-PDB consumers. This shift is consistent with existing research showing that having higher rank salient increases low-PDB consumers' awareness of inequality and motivates them to seek higher status through consuming status goods (Hopkins and Kornienko 2004) and other possible means (Javidan et al. 2006; Kirkman et al. 2009). For high-PDB consumers, considering a superior further emphasizes the importance and advantages of having higher status, consistent with their chronic desire for status (Carl et al. 2004; Hofstede 2001). Lian et al. (2012) found that although the presence of a superior makes high-PDB consumers more cautious about their behaviors to show their respect for the existing social hierarchy, internally their desire for status is not diminished. Thus when others' status is not superior, need for status should mediate the effect of PDB on status consumption due to the greater need for status among high (vs. low) PDB consumers. However, when others' status is superior, low-PDB consumers have a similar need for status as high-PDB consumers, attenuating the mediating role of need for status.

The Role of Signaling Effectiveness. Veblen ([1899] 1994, 43) pointed out that consumers should only purchase status products if they perceive the products have substantial value in signaling higher social status. Consistent with this idea, research has indicated factors that may impact the signaling value of status objects. For example, status consumption has been conceptualized as a field-specific game such that a status good can only effectively signal higher status in particular consumption fields (Holt 1998; Üstüner and Holt 2010) or when consumed by members of the "in-group" (Berger and Heath 2007). Additionally, status consumption has been found to vary based on logo visibility or prominence (Berger and Ward 2010; Han et al. 2010), autonomy or nonconformity (Bellezza et al. 2014), and public (vs. private) consumption (Thompson and Norton 2011). Presumably these differences occur because status cannot be effectively signaled when other consumers lack the cultural capital to interpret the status signal or the good is unobservable to others. Taken together, this research suggests that the extent to which status goods effectively signal status may differ, thereby impacting the likelihood of status consumption. Thus, as stated earlier, we define signaling effectiveness as the extent to which consumers believe status signals (e.g., consuming status goods) actually convey higher status in a given context. According to this definition, under a particular decision context, consumers who perceive greater signaling effectiveness believe they gain more social status from consuming a particular good, thereby motivating status consumption.

We propose signaling effectiveness is a key mediator for the moderating role of others' status on the effect of PDB on status consumption. Specifically, when others' status is not superior, we propose high (vs. low) PDB consumers tend to perceive greater signaling effectiveness from status consumption. Previous research has found that high-PDB consumers tend to view visible signals as an effective way to shape boundaries and relative status (Hwang and Matsumoto 2014; Oyserman 2006), although this research did not consider others' status. Along the same line, Wong and Ahuvia (1998) indicated that high (vs. low) PDB consumers are more likely to use products symbolically to claim desirable vertical ranking, presumably because high-PDB consumers tend to believe displays of status products are effective social markers. In contrast, low-PDB consumers tend to disvalue products used as social markers because they do not believe in social hierarchy and focus their consumption on self-expression and self-actualization. Consistent with this theorizing, Samaha, Beck, and Palmatier (2014) found that in high power distance cultures, displaying one's resources (e.g., expertise, relational network, high status in loyalty programs) significantly elevates one's social status, whereas such resources are not even viewed as a source of status in low power distance cultures and consequently cannot effectively elevate one's social status. These results were obtained when there was no consideration of superiors, which suggests that, when others' status is not superior, high (vs. low) PDB consumers tend to perceive greater signaling effectiveness of status products, increasing their status consumption.

However, when others' status is superior, we propose the opposite pattern: low (vs. high) PDB consumers tend to perceive greater signaling effectiveness from status consumption. Thinking of a superior activates social hierarchy and results in a social comparison in which the focal consumer is of inferior status. For high-PDB consumers who believe the existing social hierarchy is legitimate and cannot be challenged, they think it is impossible to improve their status relative to their superior's by any means (Hofstede et al. 2010; Javidan et al. 2006). In other words, although high-PDB consumers desire status and generally believe in using products to signal status (Hwang and Matsumoto 2014; Samaha et al. 2014; Wong and Ahuvia 1998), when others' status is superior, they will not believe such signals to convey status effectively because no matter what they do or consume, their relatively lower status compared with their superior's cannot be changed. In contrast, for low-PDB consumers who believe in equality and that the existing social hierarchy can be challenged, considering superiors drives them to seek any possible means to signal higher status for themselves so that they can achieve equality and keep up with their superior (Javidan et al. 2006; Kirkman et al. 2009). One way they can do so is by consuming status products, which serve as an effective means to signal their higher status under upward social comparison (Hopkins and Kornienko 2004; Rucker and Galinsky 2008, 2009). As a result, when others' status is superior, low (vs. high) PDB consumers believe status goods are more effective at conveying status, increasing their status consumption.

To summarize, we propose both signaling effectiveness and need for status play important roles in explaining the moderating role of others' status on the effect of PDB on status consumption. Specifically, when others' status is not superior, both need for status and signaling effectiveness mediate the effect of PDB on status consumption, whereas when others' status is superior, only signaling effectiveness, but not need for status, mediates the effect (figure 1). Formally,

H2: Need for status and signaling effectiveness mediate the moderating role of others' status on the effect of PDB on status consumption. When others' status is not superior, both need for status and signaling effectiveness mediate the effect of PDB. When others' status is superior, only signaling effectiveness mediates the effect of PDB.

We report four studies to test the proposed theoretical framework. Study 1 shows initial support for the moderating role of others' status on the effect of PDB on status consumption in a field setting, which provides external validity. Study 2 provides causal evidence for the proposed interaction by manipulating both PDB and others' status as superior versus similar. Study 3 extends the examination of others' status to include inferior, which provides further support for our key hypotheses and tests the mediating roles of signaling effectiveness and need for status. Study 4 demonstrates consumption situation as a boundary condition, which provides additional support for the role of signaling effectiveness.

STUDY 1

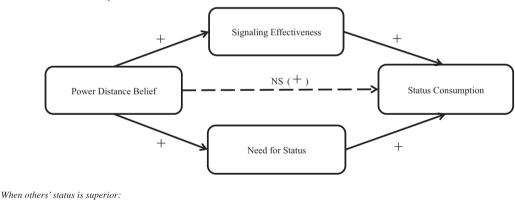
We first sought to test hypothesis 1 in a field setting with high external validity. To do so, we surveyed attendes at a national Chinese auto exhibition, which Chinese consumers perceive as a good opportunity to buy a vehicle. Specifically, for the exhibition from which these data were collected, 32% of attendees bought a car and 56% of attendees reported they were going to buy a car in the near future.

FIGURE 1

MEDIATING ROLES OF SIGNALING EFFECTIVENESS AND NEED FOR STATUS BASED ON OTHERS' STATUS

NS, not significant.

 $When \ others' status \ is \ not \ superior:$



Power Distance Belief

NS (-)

Status Consumption

Need for Status

Sample Description

Participants were 231 Chinese consumers. They were randomly intercepted at the exhibition center and received a small gift valued at 5RMB (US \$0.78) for participation. The participants represent a broad cross section of Chinese consumers (age range: 18–70, $M_{\rm age}=33.01$ years, standard deviation [SD] = 9.37; 32.83% were female; 13.18% reported income below 50,000 RMB, 56.37% between 50,000 and 100,000 RMB, 16.37% above 100,000 RMB, and 8.18% did not disclose income). Additionally, 42.79% were base-level (i.e., nonmanagement) employees, 22.33% were low-level managers, 27.44% were middle-level managers, and 7.44% were high-level managers.

Method

Procedure. The study was a 2 (Other's status: superior vs. control) × continuous (PDB) design. Consumers who agreed to participate were guided into a quiet room and asked to complete a short paper-and-pencil survey. First, they completed the other's status manipulation and indicated their status consumption via car choice and answered some unrelated filler questions to mask the purpose of the study. Then, they completed the PDB measure and their attitudes toward the exhibition, which were collected for the organizer of the exhibition. Lastly, demographic information was collected.

Status Consumption. We asked participants to report what brand and model of car they were considering buying, as well as what brand and model of car their direct superior was driving. In China, it is customary to have a celebration when a new car is purchased so employees should know the type of car their superior drives. Indeed, only 12 participants failed to indicate the type of car their superior drove. These incomplete responses were excluded, resulting in 219 usable responses. Incomplete responses did not differ by condition.

The status of the cars was coded (1 = Lowest status association such as Chevy Sail, Ford Fiesta, and most Chinese cars to 5 = Highest status association such as Benz S200, Audi A6L, and BMW X5) by the first author and a master's student without knowledge of the study purpose with participant condition hidden. Coder agreement was 94% with all disagreements resolved through discussion. We subtracted the status score of the superior's car from the status score of the car participants intended to purchase such that positive (vs. negative) values indicate the consumer intends to buy a car of higher (vs. lower) status than his or her superior's car. We use this value of relative car status as an indicator of status consumption, consistent with past research regarding the relative nature of status consumption (Hopkins and Kornienko 2004; Ordabayeva and Chandon 2011). For instance, whereas driving BMW is status enhancing in a neighborhood where others are

driving Toyota or Ford, it is not status enhancing where others are driving Bentley or Rolls-Royce (Yang and Allenby 2003).

Other's Status. To manipulate other's status, we randomized the order of the two questions regarding the car they wanted to buy and their superior's car. In the superior condition (coded as 1), participants were asked to first report their superior's car and then report the car they wanted to buy. In the control condition (coded as -1), participants were asked to first report the car they wanted to buy and then report their superior's car. Based on the response order effect (Schwarz and Oyserman 2001), when participants were asked about their superior first (vs. second), the concept of superior should be more (vs. less) salient, their own purchasing influencing consideration. Importantly, the other's status manipulation did not impact the reported status meaning of the superior's car (b = .04, t(217) = .07, p = .94).

PDB Measurement. PDB was measured with Hofstede's (2001) 8-item scale ($\alpha=.90$; 7 point scale; online appendix). Higher scores indicate higher PDB. Importantly, this scale has been shown to be distinct from individualism/collectivism (Hofstede 2001). Since we measured PDB after the other's status manipulation and status consumption, we regressed other's status and reported status consumption on the PDB score to ensure they did not impact PDB. The results indicated neither reported status consumption (b=-.10, t (216) = -.54, p=.59) nor other's status (b=.03, t (216) = .51, p=.61) influenced PDB.

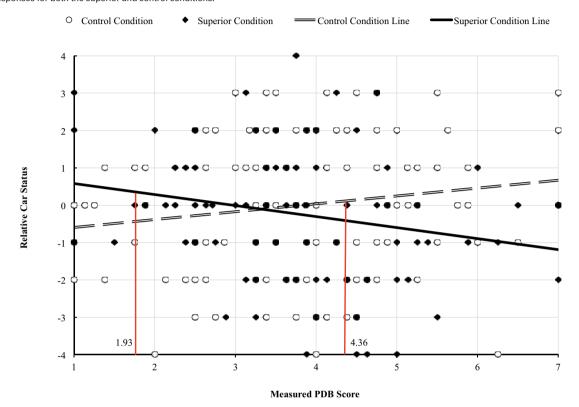
Results

We expected the two-way interaction of PDB and other's status to predict status consumption assessed with relative car status. We conducted a regression with relative car status as the dependent variable, other's status, mean centered score of PDB, and their interaction as the independent variables, and gender, age, income, employment sector, and occupational level as control variables. Among the control variables, only the effect of income was significant (b = .20, t (203) = 2.26, p = .025), indicating that as consumers' income increases, their relative car status also increases. Among the independent variables, neither PDB (b = .01, t (203) = .09, p > .92) nor other's status was significant (b = -.15, t (203) = -1.16, p > .24). However, the two-way interaction between PDB and other's status was significant (b = -.25, t(203) = -2.73, p = .007). The interaction remains when the control variables are excluded (b = -.24, t (215) = -3.24, p = .001).Additionally, if the status of participant's car is the dependent variable and superior's car status is a control variable, the interaction remains (b = -.49, t (202) =-3.21, p = .002).

FIGURE 2

THE EFFECT OF MEASURED PDB AND OTHER'S STATUS ON STATUS CONSUMPTION VIA RELATIVE CAR STATUS (STUDY 1)

Note.—Two regions of significance are identified: PDB below 1.93 (the left vertical line) and PDB above 4.36 (the right vertical line). Filled circles indicate the presence of responses for both the superior and control conditions.



Follow-up analyses following Hayes and Matthes (2009) indicated that under the control condition, PDB increased relative car status (b=.27, t (203) = 2.35, p=.019). In contrast, under the superior condition, PDB decreased relative car status (b=-.28, t (203) = -1.99, p=.047), supporting hypothesis 1. Additionally, to identify the range of PDB for which the simple effect of other's status was significant, we used the Johnson-Neyman technique ($M_{\rm PDB}=3.89$, SD = 1.03; Hayes and Matthes 2009). Two points of significance (p<.05) were identified. For consumers with PDB lower than 1.93, other's superior status (vs. control) increased relative car status, whereas for consumers with PDB higher than 4.36, other's superior status (vs. control) decreased relative car status. The regions of significance are illustrated in figure 2.

Discussion

This study provides initial support for hypothesis 1 and offers high external validity by examining the status of cars, a widely used status symbol (Han et al. 2010),

Chinese consumers were considering purchasing. Notably, the manipulation of other's status was subtle. However, the strengths of the field setting may also limit internal validity. For instance, since cars are a major purchase that may be determined some time in advance, it is possible that the self-reported purchase intention was driven by something other than PDB and question order for other's status. To address this concern, we use a more general manipulation of other's status in subsequent studies, establish a causal relationship by manipulating PDB, and replicate the findings with different product categories.

STUDY 2

Design and Participants

The study was a 2 (PDB: high vs. low) \times 2 (Other's status: superior vs. similar) between-subjects design. Participants were 171 undergraduate business students at Pennsylvania State University (age range: 18 to 43, $M_{\rm age} =$

19.36 years, SD = 1.99; 65 of them were female), who participated for partial course credit.

Method

Procedure. Participants were randomly assigned to one of the four experimental conditions and were asked to complete a series of ostensibly unrelated tasks. First, they completed the PDB prime and a filler task about their attitude towards online music download. Then, they completed the other's status manipulation and indicated status consumption. Lastly, they finished the manipulation check and demographics.

PDB Prime. We primed PDB with a sentence-unscrambling task from Zhang, Winterich, and Mittal (2010). Participants were asked to form 10 meaningful sentences from 10 sets of scrambled words with words regarding social hierarchy (high PDB) or equality (low PDB; online appendix). Three items assessed PDB priming: "For the time being, I am mainly thinking that:" "At this moment, I feel that:" and "On top of my mind right now are thoughts in agreement with saying:" (1 = Social equality is important, 7 = Social hierarchy is important). The items were averaged to form a composite score (α = .95). Higher scores indicate higher PDB.

Other's Status Manipulation. Other's status was manipulated by asking participants to describe how they would work with someone. Specifically, in the superior (similar) condition, participants were asked to imagine that they are working with their superior (coworker) on a project and to write down how they would work with their superior (coworker) on the project using at least 30 words. A pretest (Lexical Decision Task, Lepore and Brown 2002; online appendix) verified that thinking and writing about working with a superior (vs. peer) made the concept of superior more accessible.

Status Consumption. The status consumption measure was adapted from Ordabayeva and Chandon (2011). Participants were asked to imagine purchasing a new larger TV to improve the appearance of their living room, which would improve their status given that they read that larger screens represent higher tier consumers and their current TV puts them in the lowest tier (online appendix). Then participants were asked, "If you were in the above scenario, how likely would you be to purchase a larger TV?" on a 7 point scale (1 = Definitely keep the small TV, 7 = Definitely purchase a larger TV). Higher values indicate a greater likelihood of status consumption.

Results

Manipulation Check. A full-factorial analysis of variance (ANOVA) on the PDB manipulation check index indicates our priming of PDB was successful ($M_{high\ PDB}$ =

3.63 vs. $M_{\text{low PDB}} = 2.99$; F (1, 167) = 7.56, p = .007). Neither the main effect of other's status nor the interaction effect was significant (F's < 1).

Status Consumption. We conducted a full-factorial ANOVA on the likelihood of purchasing a larger screen TV, with PDB, other's status, and their interaction as the independent variables. Neither PDB nor other's status was significant (F's < 1). Importantly, their interaction effect was significant (F (1, 167) = 10.13, p = .002; figure 3). Planned contrasts indicate that when other's status is similar, high-PDB consumers were more likely to purchase a larger screen TV ($M_{\text{high PDB}}$ = 5.58 vs. $M_{\text{low PDB}}$ = 4.98; t (167) = 2.22, p = .028). In contrast, when other's status is superior, low-PDB consumers were more likely to purchase a larger TV ($M_{\text{high PDB}}$ = 4.85 vs. $M_{\text{low PDB}}$ = 5.48; t (167) = -2.28, p = .024). These results are consistent with hypothesis 1 (table 1).

Discussion

Study 2 provides further support for hypothesis 1 when other's status was activated more generally and other's status manipulation directly compared superior to peer. Status consumption was assessed with the purchase of a larger screen TV. It is important to note that although larger screen TVs can be used to signal higher status (Ordabayeva and Chandon 2011), larger size products do not always signal status (Rucker and Galinsky 2008). Together, studies 1 and 2 provide robust support for the moderating role of other's status on the effect of PDB on status consumption.

FIGURE 3 THE EFFECT OF PDB AND OTHER'S STATUS ON STATUS CONSUMPTION OF TV (STUDY 2)

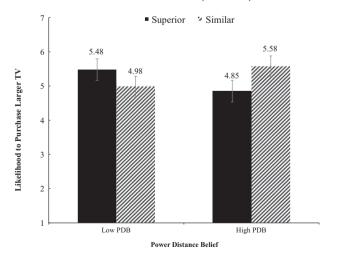


TABLE 1
SUMMARY OF CELL MEANS AND STANDARD DEVIATIONS ^A

Study	Variable	Superior		Similar		Inferior	
		Low PDB	High PDB	Low PDB	High PDB	Low PDB	High PDB
1	Cell size	49	49	61	60	NA	NA
	Status consumption	.53 (.24)	31 (.79)	67 (.51)	.77 (.33)	NA	NA
2	Cell size	44	41 ′	43 ′	43	NA	NA
	Status consumption	5.48 (.95)	4.85 (1.45)	4.98 (1.59)	5.58 (.91)	NA	NA
3	Cell size	88	76	72	79	86	83
	Status consumption	2.89 (1.58)	2.36 (1.24)	2.30 (1.19)	2.78 (1.49)	2.27 (1.12)	3.29 (1.67)
	Signaling effectiveness	4.47 (1.31)	3.93 (1.52)	4.22 (1.65)	4.68 (1.40)	3.89 (1.86)	4.55 (1.43)
	Need for status	4.74 (1.44)	4.73 (1.39)	4.20 (1.71)	4.81 (1.49)	4.29 (1.58)	4.88 (1.40)
4	Public consumption						
	Cell size	40	40	45	39	NA	NA
	Status consumption	2.45 (1.22)	1.50 (.93)	1.40 (.75)	2.21 (1.77)	NA	NA
	Private consumption						
	Cell size	38	35	49	35	NA	NA
	Status consumption	1.34 (.85)	1.37 (.97)	1.41 (1.21)	1.48 (.98)	NA	NA

NA, not applicable

^aWhen PDB is measured at the individual level in study 1, the cell means are calculated at ±1 SD of the mean. All analysis reported in the text was conducted with measured PDB as a continuous variable.

STUDY 3

In this study we extend our examination of the moderating role of other's status to inferior. In doing so, we provide a complete picture regarding how other's status moderates the effect of PDB. If we find inferior others and similar others to have similar effects on status consumption as we hypothesize, then we demonstrate that it is not simply a difference in relative status that drives effects but rather it is specifically the upward social comparison (comparison to superior) that alters the effect of PDB on status consumption. In addition, examining inferior others provides strong support for the mediating role of signaling effectiveness in explaining the role of other's status in moderating the effect of PDB on status consumption. According to the signaling effectiveness explanation we theorize, the effect of PDB on status consumption under the similar condition should be similar in the inferior condition. For high-PDB consumers, they tend to perceive consumption of status goods as an effective way to differentiate from inferiors and clearly signal their relatively higher status (Bond et al. 1985; Hofstede et al. 2010). In contrast, when other's status is inferior for low-PDB consumers, it is not consistent with their belief of equality (Brockner et al. 2001; Hofstede et al. 2010). Since the consumers are of higher status, they are not seeking to increase their own status to achieve equality; instead, they perceive consuming status markers as counterproductive to the desired equality and find them ineffective. Similar to the pattern for signaling effectiveness, when other's status is inferior, high-PDB consumers tend to have a higher need for status than low-PDB consumers, given that high-PDB consumers chronically desire social status and low-PDB

consumers emphasize equality (Hofstede et al. 2010; Kirkman et al. 2009). More importantly, in this study, we test the mediating roles of signaling effectiveness and need for status.

Design and Participants

To test the previously outlined theorizing, study 3 follows a 2 (PDB: high vs. low) \times 3 (Other's status: superior vs. similar vs. inferior) between-subjects design. Participants were 484 undergraduate business students from Pennsylvania State University and University of Texas-San Antonio (age range: 18–51, $M_{\rm age}=21.54$, SD $_{\rm age}=4.43$; 234 were female), who participated for partial course credit.

Method

Procedure. The procedure of this study was similar to that of study 2 with three exceptions. First, in the other's status manipulation, we added the inferior condition to the superior and similar conditions. Second, we measured status consumption with a different product category: executive pen. Third, we measured the proposed mediators of signaling effectiveness and need for status, which were randomly ordered.

Other's Status. The other's status manipulation for the superior and similar conditions was the same as that used in study 2. In the inferior condition, participants were asked to "imagine you are working with one of your subordinates on a project. Subordinates refer to individuals who have a lower rank than you in your organization or company, such as those who work for you, work under your

lead, or are junior to you. In the next three minutes, please write down how you would work with your subordinates on this project." In all three conditions, participants were asked to write with at least 30 words. To check this manipulation, we asked participants to report, "Earlier, you were asked to imagine working on a project with someone. Please indicate who you were thinking about on the following statements:" "To what extent were you thinking about someone of higher social status than you?" "To what extent were you thinking about someone of inferior social status than you?"

Status Consumption. The status consumption measure was adapted from Rucker and Galinsky (2009). Participants were exposed to an advertisement for a Parker pen, which was "designed to impress" and "commands respect from others." After viewing the ad, participants indicated their purchase intention for the pen on three items ($\alpha = .82$; on line appendix). Higher scores indicate greater likelihood of status consumption.

Signaling Effectiveness. Signaling effectiveness was measured by asking participants to indicate the extent to which they agreed with four statements (e.g., Purchasing this product will improve my social status) at this moment (online appendix). Responses on the four items were averaged to form the signaling effectiveness index ($\alpha = .89$). Higher scores indicate that status signals are perceived to be more effective.

Need for Status. Need for status was measured with a four item scale ($\alpha = .86$, online appendix) adapted from Dubois et al. (2012). Although related, signaling effectiveness and need for status are not highly correlated (r = .43).

Results

Manipulation Check. To test the successfulness of the other's status manipulation, we conducted a multivariate two-way ANOVA on the three manipulation check items with PDB, other's status, and their interaction as the independent variables. For all three items, the main effects of PDB (F's < 1) and the interaction effects (F's < 1.67, p > .188) were not significant, indicating PDB does not impact who is salient. However, the main effects of other's status were significant on all three items (superior salient score: F(2, 478) = 13.69, p < .001; peer salient score: F(2, 478)= 14.92, p < .001; inferior salient score: F (2, 478) =10.67, p < .001). Further analyses indicate that superior was more salient under the superior condition ($M_{\text{superior}} =$ 3.93 vs. $M_{\text{similar}} = 2.84$; t (478) = 4.89, p < .001; vs. $M_{\text{inferior}} = 3.07$; t (478) = 4.01, p < .001); peer was more salient under the similar condition: $(M_{\text{similar}} = 4.76 \text{ vs.})$ $M_{\text{superior}} = 3.63$; t (478) = 5.35, p < .001; vs. $M_{\text{inferior}} =$ 3.98; t (478) = 3.74, p < .001); and inferior was more salient under the inferior condition ($M_{inferior} = 3.54$ vs. $M_{\text{superior}} = 2.61$; t (478) = 4.55, p < .001; vs. $M_{\text{similar}} = 2.94$; t (478) = 2.91, p = .004). Thus the other's status manipulation was successful.

Status Consumption. According to our theorizing, we expect high-PDB consumers are more likely to engage in status consumption when other's status is not superior (similar and inferior), but low-PDB consumers are more likely to engage in status consumption when other's status is superior. Given other's status was a three-level variable (inferior vs. similar vs. superior) and our focal contrast is between not superior (similar and inferior) versus superior, we tested our hypotheses using the orthogonal contrast codes recommended by Rosenthal, Rosnow, and Rubin (2000). Specifically, we used two contrast codes. Contrast code 1 was coded as superior (2) versus inferior (-1) and similar (-1). Contrast code 2 was coded as inferior (-1)versus similar (1) controlling for superior (0). To test hypothesis 1, we conducted a full-factorial ANOVA on the status consumption measure with PDB, contrast code 1, contrast code 2, and the interaction of each contrast code with PDB as independent variables. PDB, contrast code 1, contrast code 2, and the interaction of PDB and contrast code 2 were all not significant. Importantly, the interaction of contrast code 1 and PDB was significant (F (1,478) = 15.56, p < .001).

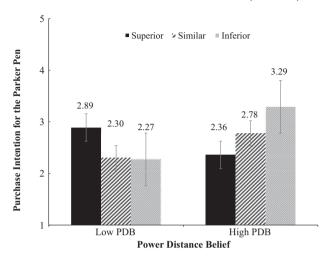
Planned contrasts for contrast code 1 revealed that when other's status is not superior (inferior or similar), high-PDB consumers were more likely to purchase the executive pen than their low-PDB counterparts ($M_{\rm high}$ PDB = 2.97 vs. $M_{\rm low}$ PDB = 2.28; t (478) = 4.18, p < .001), whereas when other's status is superior, low-PDB consumers were more likely to purchase the executive pen ($M_{\rm high}$ PDB = 2.36 vs. $M_{\rm low}$ PDB = 2.89; t (480) = -2.10, p = .036). Results remain when we examine the effect of PDB separately for similar ($M_{\rm high}$ PDB = 2.78 vs. $M_{\rm low}$ PDB = 2.30; t (478) = 1.97, p = .050) and inferior ($M_{\rm high}$ PDB = 3.29 vs. $M_{\rm low}$ PDB = 2.27; t (478) = 4.64, p < .001) conditions (figure 4).

Signaling Effectiveness. We conducted the same analysis for signaling effectiveness. PDB, contrast code 1, contrast code 2, and the interaction of PDB and contrast code 2 were all not significant. Importantly, the interaction of contrast code 1 and PDB was significant (F (1, 478) = 11.18, p < .001).

Planned contrasts for this interaction effect indicated that when other's status was not superior, high-PDB consumers perceived greater signaling effectiveness ($M_{\rm high}$ $_{\rm PDB} = 4.65$ vs. $M_{\rm low}$ $_{\rm PDB} = 4.09$; t (478) = 3.14, p = .002), whereas when other's status was superior, low-PDB consumers perceived greater signaling effectiveness ($M_{\rm high}$ $_{\rm PDB} = 3.93$ vs. $M_{\rm low}$ $_{\rm PDB} = 4.47$; t (478) = -2.04, p = .039). When we examine the effect of PDB separately, the contrast is marginally significant for similar ($M_{\rm high}$ $_{\rm PDB} = 4.68$ vs. $M_{\rm low}$ $_{\rm PDB} = 4.22$; t (478) = 1.89, p = .06) and

FIGURE 4

THE INTERACTION OF PDB AND OTHER'S STATUS ON STATUS CONSUMPTION OF PARKER PEN (STUDY 3)



remains significant for inferior ($M_{\text{high PDB}} = 4.55 \text{ vs. } M_{\text{low}}$) $P_{\text{DB}} = 3.89$; t (478) = 2.74, p < .01; figure 5).

Need for Status. We conducted the same analysis for need for status. Contrast code 1, contrast code 2, and the interaction of PDB and contrast code 2 were all not significant. PDB has a significant effect (F (1, 478) = 4.14, p = .042), with high-PDB consumers indicating a higher need for status ($M_{\text{high PDB}}$ = 4.80 vs. $M_{\text{low PDB}}$ = 4.49), which is consistent with past research (Hofstede et al. 2010; Lalwani et al. 2014). Importantly, the interaction of contrast code 1 and PDB was also significant (F (1, 478) = 4.03, p = .045).

Planned contrasts for this interaction effect indicated that when other's status was not superior, high-PDB consumers showed higher need for status ($M_{\rm high\ PDB} = 4.86$ vs. $M_{\rm low\ PDB} = 4.24$; t (478) = 3.49, p < .001), whereas when other's status was superior, both high- and low-PDB consumers showed similar need for status ($M_{\rm high\ PDB} = 4.73$ vs. $M_{\rm low\ PDB} = 4.74$; t < 1). The results remain when the effect of PDB is examined separately by similar ($M_{\rm high\ PDB} = 4.81$ vs. $M_{\rm low\ PDB} = 4.20$; t (478) = 2.47, p = .014) and inferior ($M_{\rm high\ PDB} = 4.88$ vs. $M_{\rm low\ PDB} = 4.29$; t (478) = 2.56, p = .011; figure 5) conditions.

Mediating Roles of Signaling Effectiveness and Need for Status. Hypothesis 2 predicts that when other's status is not superior (similar and inferior), both signaling effectiveness and need for status mediate the effect of PDB on status consumption. When other's status is superior, only signaling effectiveness is expected to mediate the effect of PDB. First, we verified the signaling effectiveness, need

for status, and status consumption constructs loaded on three different factors through an exploratory factor analysis (eigenvalues >1: Kaiser 1960). Then, we examined the role of multiple mediators (model 8 in PROCESS; Hayes 2013). Purchase intention was the dependent variable, signaling effectiveness and need for status were the mediators, PDB was the independent variable, contrast code 1 (superior vs. similar and inferior) was the moderator, and contrast code 2 was included as a control variable. The indirect effect of the PDB and other's status interaction on purchase intention through signaling effectiveness was significant (indirect effect = -.0581, standard error [SE] =.0245, 95% confidence interval [CI], -.1180 to -.0196). Conditional indirect effects revealed when other's status is not superior, the indirect effect of PDB on purchase intention through signaling effectiveness was positive (indirect effect = .0942, SE = .0423, 95% CI, .0292 to 1983). When other's status is superior, the indirect effect was negative (indirect effect = -.0802, SE = .0454, 95% CI, -.1938 to -.0118).

The indirect effect of the PDB and other's status interaction on purchase intention through need for status was also significant (indirect effect =-.0280, SE =.01768, 95% CI, -.0726 to -.0042). Conditional indirect effects reveal that when other's status is not superior, the indirect effect of PDB on purchase intention through need for status was positive and significant (indirect effect =.0849, SE =.0393, 95% CI, .0263 to 1842). However, when other's status is superior, the indirect effect was not significant (indirect effect =.0008, SE =.0372, 95% CI, -.0659 to .0643).

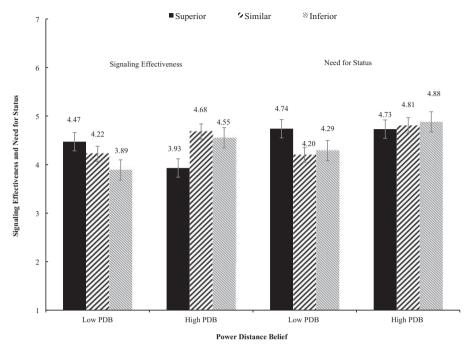
In other words, the results from the mediation analysis reveal that when other's status is not superior (inferior and similar), the effect of PDB on status consumption is driven by both signaling effectiveness and need for status. When other's status is superior, the effect of PDB is only driven by signaling effectiveness but not need for status, supporting hypothesis 2.

Discussion

This study has accomplished two important goals. First, it further replicated the interaction effect of PDB and other's status on status consumption even when considering inferiors, providing a complete examination of the effect of other's status. Second, this study sheds light on the underlying processes. Specifically, low (vs. high) PDB consumers perceive status products to be more effective at signaling status when other's status is superior, which results in greater purchase intention for status products (i.e., Parker pen). In contrast, high (vs. low) PDB consumers perceive status products to be more effective at signaling status when other's status is similar or inferior. Consistent with existing research (Hofstede 2001; Lalwani et al. 2014), higher PDB did indicate a higher need for status, but need for status did not explain the interaction effect.

FIGURE 5

THE INTERACTION OF PDB AND OTHER'S STATUS ON SIGNALING EFFECTIVENESS AND NEED FOR STATUS (STUDY 3)



Even though high-PDB consumers did not decrease their need for status, they perceive less signaling effectiveness when other's status is superior, which decreases purchase intention for the status product.

Although need for status has been well established in the status consumption literature, our mediation shows that signaling effectiveness is essential to explaining the moderating role of others' status on the effect of PDB. In the next study, we seek to further test the role of signaling effectiveness by demonstrating that consumption situation is a theoretically relevant boundary condition. In The Theory of Leisure Class, Veblen ([1899]1994) explicitly pointed out that leisure activities and status goods can effectively signal social status and wealth of the owners when publicly consumed, but when these products are not obtrusive to others, they do not enhance the owners' image. This argument is further supported by more recent empirical research demonstrating that consumption of status goods differs in public versus private situations (Berger and Ward 2010; Thompson and Norton 2011; Wang and Griskevicius 2014). Even though signaling effectiveness was not explicitly tested in these studies, presumably these effects occurred because status products need to be publicly consumed to be an effective signal of status. If the product is only for private use, then it is unlikely to convey status to others. The lack of signaling effectiveness in private consumption situations should mitigate the two-way

interaction of PDB and others' status on status consumption. Formally,

H3: The moderating role of others' status on the effect of PDB is attenuated when the status product is used for private (vs. public) consumption.

STUDY 4

Design and Participants

The study was a 2 (PDB: high vs. low) \times 2 (Other's status: superior vs. similar) \times 2 (Consumer situation: public vs. private) between-subjects design. Participants were 321 US consumers recruited from Mechanical Turk (age range: 18–73; $M_{\rm age} = 32.34$ years, SD = 10.98; 129 were female), who participated in the study for a small cash incentive.

Method

Procedure. Participants were randomly assigned to one of the eight experimental conditions and were asked to complete the following ostensibly unrelated tasks in sequence. First, they completed the PDB priming and then the other's status manipulation from study 2. Next, they received the public versus private consumption manipulation

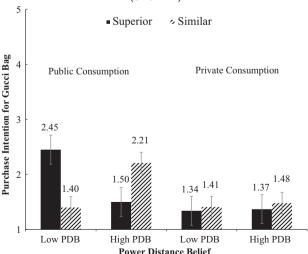
and reported purchase intentions. Lastly, they completed the manipulation check and demographics.

PDB Prime. PDB was primed with a writing task from Zhang et al. (2010; online appendix). Participants were asked to write a short essay based on the following statement: "There should be an order of inequality in this world in which everyone has a rightful place; high and low are protected by this order." Participants in the high (vs. low) PDB condition were asked to list three reasons to *support* (argue against) this statement. The same three manipulation check items were used ($\alpha = .97$).

Consumption Situation. In the public consumption condition, participants were asked to "imagine you are buying a handbag or leather bag for public usage, in which the people around you can see your bag." For private consumption, participants were asked to "imagine you are buying a handbag or leather bag for private usage, in which you are going to run some errands in your car and no one else would see your bag." Those in the private consumption condition were also assured that their responses would be anonymous. This manipulation follows Berger and Ward (2010).

Status Consumption. Immediately after the consumption situation manipulation, participants were exposed to two images of a Gucci handbag and a Gucci leather bag. This stimulus includes products for both men and women to account for gender (Fuchs et al. 2013). Participants indicated how likely would they be to purchase one of the featured bags on a 7 point scale (1 = Very unlikely, 7 = Very likely; online appendix).

FIGURE 6
THE MODERATING ROLE OF CONSUMPTION SITUATION (STUDY 4)



Results

Manipulation Check. Results from a full-factorial ANOVA on the PDB manipulation check indicated that only the effect of PDB was significant ($M_{\rm high\ PDB}=3.10$ vs. $M_{\rm low\ PDB}=2.18$, F(1,313)=25.48, p<.001). Thus our priming of PDB was successful.

Status Consumption. According to hypothesis 3, public versus private consumption should moderate the effect of PDB and other's status on status consumption such that the two-way interaction of PDB and other's status should be attenuated under private consumption when consuming status goods is not perceived as an effective status signal regardless of PDB and other's status. To test this prediction. we conducted a full-factorial ANOVA on status consumption with PDB, other's status, consumption situation, and all their two-way and three-way interactions as the independent variables. The results indicated the three-way interaction effect was significant (F(1, 313) = 8.11, p =.005). For public consumption, we replicated the two-way interaction of PDB and other's status on status consumption (F(1, 313) = 15.75, p < .001): when other's status is similar, high-PDB consumers were more likely to purchase the Gucci bag than low-PDB consumers ($M_{high PDB} = 2.21$ vs. $M_{\text{low PDB}} = 1.40$, t (313) = 2.55, p = .011); in contrast, when other's status is superior, the opposite pattern occurs $(M_{\text{high PDB}} = 1.50 \text{ vs. } M_{\text{low PDB}} = 2.45, t (313) = -3.39, p$ = .001). However, under private consumption, the twoway interaction was not significant (F < 1). Thus hypothesis 3 is supported (figure 6).

Discussion

Recognizing that private consumption of luxury goods is not likely to signal status effectively (Veblen [1899]1994; Wang and Griskevicius 2014), this study demonstrates the two-way interaction of PDB and other's status on status consumption is attenuated when consumption is private, supporting hypothesis 3. This moderating role of consumption situation provides further support for the underlying role of signaling effectiveness in explaining the two-way interaction of PDB and other's status on status consumption via a moderation-of-process design (Spencer, Zanna, and Fong 2005). In addition, we measured signaling effectiveness in this study and find support for signaling effectiveness as the key mechanism underlying the three-way interaction effect of PDB, other's status, and consumption situation on status consumption via mediation analysis (on line appendix). We note that average purchase intentions were lower in this study compared to studies 2 and 3, but this may be due to the high cost of Gucci products. Importantly, even though overall intentions to purchase were lower, the predicted interaction was still evident.

GENERAL DISCUSSION

This research offers insight regarding how and why PDB impacts status consumption. First, the effect of PDB on status consumption depends on the contextual factor of others' status: when there is no obvious salient other (study 1) or salient others' status is not superior (similar, studies 2-4; inferior, study 3), high (vs. low) PDB consumers are more likely to pursue status consumption, consistent with past research (Lalwani et al. 2014; Wong and Ahuvia 1998). However, when others' status is superior (studies 1– 4), low (vs. high) PDB consumers are more likely to engage in status consumption. Furthermore, we identify signaling effectiveness and need for status as the underlying processes. Specifically, whereas both signaling effectiveness and need for status mediate the effect of PDB when others' status is not superior, only signaling effectiveness mediates the effect of PDB when others' status is superior.

Results from one field survey and three additional experiments provide convergent and robust support for our theorizing. The series of studies uses different operationalizations of PDB, others' status, and status consumption as well as different sample populations. The field setting of study 1 offers strong external validity while the manipulation of both PDB and others' status in subsequent studies enhances internal validity. We also provide empirical support for the mediating roles of both signaling effectiveness and need for status (study 3) with study 4 demonstrating that consumption situation is a boundary condition for the effect of PDB and others' status on status consumption since the private condition does not allow for effective signaling. Together, this research contributes to the existing literature in multiple ways.

Theoretical Contributions

First, we enrich the emerging literature on the effect of PDB on status consumption by demonstrating that the effect depends on the contextual factor of others' status. In doing so, we answer calls for additional research on crosscultural effects on status consumption (Dubois and Ordabayeva 2015; Lalwani et al. 2014). Specifically, we show that consumers react differently to information regarding others' status depending on their PDB. Identifying the moderating role of others' status emphasizes the important role of contextual factors such as others' status and public versus private consumption in fully understanding the impact of PDB on consumer decision making more generally, advancing the PDB literature. We also build on existing social comparison effects in status consumption literature (Bellezza et al. 2014; Hopkins and Kornienko 2004; Ordabayeva and Chandon 2011; Shalev and Morwitz 2012; Yang and Allenby 2003) by providing the first comprehensive study of how the salience of others with

different levels of relative status impacts high- versus low-PDB consumers' status consumption.

Although previous research shows that upward social comparisons increase status consumption (Berger and Heath 2007; Hopkins and Kornienko 2004; Ordabayeva and Chandon 2011), we find that upward social comparisons regarding social status, which we propose occur when the salient others' status is superior, decrease status consumption for high (vs. low) PDB consumers. Although contrary to traditional wisdom in the status consumption literature, this finding is theoretically consistent with recent developments in the social comparison literature that challenge the traditional view that downward social comparisons always result in dissociation (Shalev and Morwitz 2012; White, Simpson, and Argo 2014). Together with existing research, the complexity of social comparison effects on consumer behavior, especially status consumption, is illustrated.

Second, various mechanisms have been identified to explain the effect of PDB on consumer behavior (Lalwani et al. 2014; Matsumoto 2006; Winterich and Zhang 2014; Zhang et al. 2010) as well as motivations for status consumption (Ordabayeva and Chandon 2011; Wang and Griskevicius 2014). By demonstrating the effect of PDB on status consumption is driven by both signaling effectiveness and need for status, we provide a more comprehensive picture in understanding effects of culture, specifically PDB, on status consumption. Although the concept of signaling effectiveness has been used to explain effects on status consumption (Berger and Ward 2010; Veblen [1899] 1994; Wang and Griskevicius 2014), we provide the first direct empirical test of this construct. Signaling effectiveness allows for a more complete theoretical framework regarding the interaction between PDB and others' status, indicating the fruitfulness of signaling effectiveness in understanding status consumption, particularly when others' status is superior. Consistent with the role of signaling effectiveness, we demonstrate the effect of PDB and others' status on status consumption further depends on the consumption situation. Thus the perceived effectiveness of the product as a status signal is more important than the product itself.

Lastly, this research offers insight regarding the perception that low-PDB consumers have no need for status consumption (Wong and Ahuvia 1998). Although we find that high (vs. low) PDB consumers are more likely to engage in status consumption when others' status is not superior, consistent with research suggesting low-PDB consumers have less desire for status (Hofstede et al. 2010; Wong and Ahuvia 1998), we demonstrate that low-PDB consumers are more likely than high-PDB consumers to engage in status consumption when others' status is superior. That is, when it comes to "keeping up" or "not being left behind," low-PDB consumers are motivated to seek higher status (high need for status) and view status consumption as an effective way to signal they are equal to their superior on

status (high signaling effectiveness). In contrast, although high-PDB consumers have a greater desire for status (Lalwani et al. 2014), a novel and important finding in the current research is that they do not express this desire through status consumption when others' status is superior because they do not believe such consumption can effectively signal status to a superior. Thus the decrease in status consumption does not occur due to a decrease in need for status; rather, they perceive status consumption to have limited signaling effectiveness when others' status is superior.

Practical Implications, Limitations, and Future Research Considerations

The current research may be of interest to marketers of status brands. Results suggest that status brands may benefit from making superior others salient in low power distance cultures, but activation of superior others may not be beneficial to status brands in cultures characterized by high power distance. Additionally, given the role of perceived signaling effectiveness in our studies, it may be useful to emphasize the signaling effectiveness of status goods, which could be done by directly defining the product as an effective signal (study 3) or emphasizing the public value of the product (study 4).

Limitations and Future Research. One concern may regard the distinction between PDB and others' status. Although both constructs pertain to hierarchy, they are distinct (Oyserman 2006; Zhang et al. 2010). PDB represents an individual's subjective attitude toward power disparity (Hofstede 2001), whereas others' status is a contextual factor that pertains to the accessibility of someone else and their relative status at a given time. This conceptual distinction is supported empirically because PDB does not impact the salience of others' status in study 3 and others' status does not impact the measure of PDB or the PDB manipulation check in other studies. Thus future research examining the role of PDB on consumer behaviors such as impulsive consumption or product design preferences should account for the potential moderating effect of others' status.

Another question that may arise when considering these findings is the role of power, which has been found as an important antecedent for status consumption (Dubois et al. 2012; Rucker and Galinsky 2009). First, it is important to determine whether PDB and others' status are independent of power. It could be power is confounded with our focal variables such that high-PDB consumers feel less powerful than their low-PDB counterparts or thinking of superiors (vs. peers or inferiors) makes consumers feel powerless. Conceptually, PDB and power are two different constructs, as both Oyserman (2006) and Zhang et al. (2010) pointed out: PDB is a cultural value representing consumers'

general attitudes toward the fact that power and social status is distributed unequally; power is a psychological state pertains to whether consumers feel powerful or not. Although there is no existing research examining the differences between others' status and power, we believe they are also related but distinct constructs because the others' status pertains to salience of someone else. An independent post-test finds power to be distinct from both PDB (measured with CVSCALE; Yoo, Donthu, and Lenartowicz 2011) and others' status (see online appendix for details). Given these differences, future research can explore how power might alter the effect of PDB and others' status on status consumption.

Another potential concern is whether our findings could be attributed to impression management, instead of signaling effectiveness and need for status. This argument may arise given that high-PDB consumers tend to care more about impression management (Lalwani 2009) and make more effort to avoid normatively inappropriate behaviors in front of superiors (Kirkman et al. 2009; Lian et al. 2012). However, theoretically we do not believe impression management can fully explain our results because research indicates that impression management should increase rather than decrease status consumption (Thompson and Norton 2011), and it does not account for the difference in status consumption when others' status is not superior. An additional study not reported in this article measured both signaling effectiveness and impression management but only signaling effectiveness mediated the focal interaction.

Together, this research demonstrates how the contextual factor of others' status impacts the effect of the cultural value of PDB on status consumption through signaling effectiveness and need for status. This research advances the status consumption literature and also spurs research that considers the complexities of the effect of PDB on consumer behaviors.

DATA COLLECTION INFORMATION

The first author analyzed the data for study 1, which were collected by Dr. Yiren Dong from Nanjing University under the instruction of the first author in fall 2012. The second author supervised data collection for study 2 by research assistants in the behavioral research lab at Penn State University, Smeal College of Business, in fall 2014. The first author analyzed these data. The second and third authors supervised the data collection for study 3 by research assistants in their respective behavioral labs (Penn State University and University of Texas at San Antonio) in the fall of 2015, and both the first and the second author analyzed the data. The data for study 4 were collected through MTurk by the first author in spring 2015 and analyzed by the first author. The data of the pretest before

study 2 (reported in the online appendix) were collected by the first author through MTurk in the spring of 2015 and were analyzed by the first author. The third author collected the data for the posttest study reported in the online appendix, which was analyzed by the first author.

REFERENCES

- Aaker, Jennifer (2006), "Delineating Culture," *Journal of Consumer Psychology*, 16 (4), 343-47.
- Atwater, Leanne, Mo Wang, James W. Smither, and John W. Fleenor (2009), "Are Cultural Characteristics Associated with the Relationship Between Self and Others' Ratings of Leadership?" *Journal of Applied Psychology*, 94 (4), 876-86.
- Bellezza, Silvia, Francesca Gino, and Anat Keinan (2014), "The Red Sneakers Effect: Inferring Status and Competence from Signals of Nonconformity," *Journal of Consumer Research*, 41 (1), 35-54.
- Berger, Jonah and Chip Heath (2007), "Where Consumers Diverge from Others: Identity-Signaling and Product Domains," *Journal of Consumer Research*, 34 (2), 121-34.
- Berger, Jonah and Morgan K. Ward (2010), "Subtle Signals of Inconspicuous Consumption," *Journal of Consumer Research*, 37 (4), 555-69.
- Bond, Michael H., Kwok-Choi Wan, Kwok Leung, and Kwok A. Giacalone (1985), "How Are Responses to Verbal Insult Related to Cultural Collectivism and Power Distance," *Journal of Cross-Cultural Psychology*, 16 (1), 111-27.
- Brockner, Joel, Grant Ackerman, Jerald Greenberg, Anne Marie Francesco, Zhen Xiong Chen, Kwok Leung, Gunter Bierbrauer, Carolina Gomez, Bradley L. Kirkman, and Debra Shapiro (2001), "Culture and Procedural Justice: The Influence of Power Distance on Reactions to Voice," *Journal of Experimental Social Psychology*, 37 (4), 300-15.
- Carl, Dale, Gupta, Vipin and Mansour Javidan (2004), "Power Distance," in *Culture, Leadership, and Organizations*, ed. Robert J. House, Paul J, Hanges, Mansour Javidan, Peter W. Dorfman,nd Vipin Gupta, Thousand Oaks, CA: Sage, 513-63.
- D'Arpizio, Claudia, Federica Levato, Daniele Zito, and Joelle de Montgolfier (2014), "Luxury Goods Worldwide Market Study Fall-Winter 2014: The Rise of the Borderless Consumer," http://www.bain.com/publications/articles/lux ury-goods-worldwide-market-study-december-2014.aspx.
- Dubois, David and Nailya Ordabayeva (2015), "Social Hierarchy, Social Status and Status Consumption" in *Cambridge Handbook of Consumer Psychology*, ed. Mike I. Norton, Derek D. Rucker,nd Cait P. Lamberton, New York, Cambridge University Press, 332-367.
- Dubois, David, Derek D. Rucker, and Adam D. Galinsky (2012), "Super Size Me: Product Size as a Signal of Status," *Journal of Consumer Research*, 38 (6), 1047-62.
- Erdem, Tulin, Joffre Swait, and Ana Valenzuela (2006), "Brands as Signals: A Cross-Country Validation Study," *Journal of Marketing*, 70 (1), 34-49.
- Feldman, Jack M. and John G. Lynch Jr. (1988), "Self-Generated Validity and Other Effects of Measurement on Belief, Attitude, Intention, and Behavior," *Journal of Applied Psychology*, 73 (3), 421-35.
- Festinger, Leon (1954), "A Theory of Social Comparison Process," *Human Relations*, 7 (2), 117-40.

- Fuchs, Christoph, Emanuela Pradelli, Martin Schreier, and Darren
 W. Dahl (2013), "All That Is Users Might Not Be Gold: How
 Labeling Products as User Designed Backfires in Context of
 Luxury Fashion Brands," *Journal of Marketing*, 77 (5), 75-91
- Han, Young Jee, Joseph C. Nunes, and Xavier Drèze (2010),
 "Signaling Status with Luxury Goods: The Role of Brand Prominence," *Journal of Marketing*, 74 (4),
 14-30
- Hayes, Andrew F. (2013), Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach, New York: Guilford.
- Hayes, Andrew F. and Jörg Matthes (2009), "Computational Procedures for Probing Interactions in OLS and Logistic Regression: SPSS and SAS Implementations," *Behavior Research Methods*, 41 (3), 924-36.
- Hofstede, Geert (2001), Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations across Nations, Thousand Oaks, CA: Sage.
- Hofstede, Geert, Hofstede Gert Jan, and Minkov Michael (2010), Cultures and Organizations: Software of the Mind: Intercultural Cooperation and Its Importance for Survival, New York: McGraw-Hill.
- Holt, Douglas B. (1998), "Does Cultural Capital Structure American Consumption?" *Journal of Consumer Research*, 25 (1), 1-25.
- Hopkins, Ed and Tatiana Kornienko (2004), "Running to Keep in the Same Place: Consumer Choice as a Game of Status," *American Economic Review*, 94 (4), 1085-1107.
- Hwang, Hyisung C. and David Matsumoto (2014), "Cultural Differences in Victory Signals of Triumph," *Cross-Cultural Research*, 48 (2), 177-91.
- Javidan, Mansour, Peter W. Dorfman, Mary Sully de Luque, and Robert J. House (2006), "In the Eye of the Beholder: Cross Cultural Lessons in Leadership from Project GLOBE," Academy of Management Perspectives, 20 (1), 95-101.
- Kaiser, Henry F. (1960), "The Application of Electronic Computers to Factor Analysis," Educational and Psychological Measurement, 20, 141-51.
- Kim, Youngseon and Yinlong Zhang (2014), "The Impact of Power-Distance Belief on Consumers' Preference for Status Brands," *Journal of Global Marketing*, 27 (1), 13-29.
- Kirkman, Bradley L., Gilad Chen, Jiing-Lih Farh, Zheng Xiong Chen, and Kevin B. Lowe (2009), "Individual Power Distance Orientation and Follower Reactions to Transformational Leaders: A Cross-Level, Cross-Cultural Examination," *Academy of Management Journal*, 52 (4), 44-64.
- Lalwani, Ashok K. (2009), "The Distinct Influence of Cognitive Busyness and Need for Closure on Cultural Differences in Socially Desirable Responding," *Journal of Consumer Research*, 36 (2), 305-16.
- Lalwani, Ashok K., Carlos J. Torelli, Jessie Wang, and Yajin Wang (2014), "Power Distance Belief and Consumers' Preference for Premium (vs. Generic) Brands: The Role of Consumers' Status and Product Type," working paper.
- Lepore, Lorella and Rupert Brown (2002), "The Role of Awareness: Divergent Automatic Stereotype Activation and Implicit Judgment Correction," *Social Cognition*, 20 (4), 321-51.
- Lian, Huiwen, D. Lance Ferris, and Douglas J. Brown (2012), "Does Power Distance Exacerbate or Mitigate the Effects of Abusive Supervision? It Depends on the Outcome," *Journal of Applied Psychology*, 97 (1), 107-23.

- Matsumoto, David (2006), "Are Cultural Differences in Emotion Regulation Mediated by Personality Traits?" *Journal of Cross-Cultural Psychology*, 37 (4), 421-37.
- Mattila, Anna S. (1999), "The Role of Culture and Purchase Motivation in Service Encounter Evaluations," *Journal of Services Marketing*, 13 (4/5), 376-89.
- Ordabayeva, Nailya and Pierre Chandon (2011), "Getting Ahead of the Joneses: When Equality Increases Conspicuous Consumption among Bottom-Tier Consumers," *Journal of Consumer Research*, 38 (1), 27-41.
- Oyserman, Daphna (2006), "High Power, Low Power, and Equality: Culture Beyond, Individualism and Collectivism," *Journal of Consumer Psychology*, 16(4), 352-56.
- Rosenthal, Robert, Ralph L. Rosnow, and Donald B. Rubin (2000), Contrasts and Effect Sizes in Behavioral Research: A Correlational Approach, New York: Cambridge University Press.
- Roth, Martin S. (1995), "The Effects of Culture and Socioeconomics on the Performance of Global Brand Image Strategies," *Journal of Marketing Research*, 32 (2), 163-75.
- Rucker, Derek D. and Adam Galinsky (2008), "Desire to Acquire: Powerlessness and Compensatory Consumption," *Journal of Consumer Research*, 35 (2), 257-67.
- (2009), "Conspicuous Consumption versus Utilitarian Ideals: How Different Levels of Power Shape Consumer Consumption," *Journal of Experimental Social Psychology*, 45 (3), 549-55.
- Samaha, Stephen A., Joshua T. Beck, and Robert W. Palmatier (2014), "The Role of Culture in International Relationship Marketing," *Journal of Marketing*, 78 (5), 78-98.
- Schwarz, Norbert and Daphna Oyserman (2001), "Asking Questions About Behavior: Cognition, Communication, and Questionnaire Construction," *American Journal of Evaluation*, 22 (2), 127-60.
- Shalev, Edith and Vicki G. Morwitz (2012), "Influence via Comparison-Driven Self-Evaluation and Restoration: The Case of the Low-Status Influencer," *Journal of Consumer Research*, 41 (1), 31-47.
- Spencer, Steven J., Mark P. Zanna, and Geoffrey T. Fong (2005), "Establishing a Causal Chain: Why Experiments Are Often

- More Effective Than Mediational Analyses in Examining Psychological Processes," *Journal of Personality and Social Psychology*, 89 (6), 845–51.
- Steckler, Nicole A. and Robert Rosenthal (1985), "Sex Differences in Nonverbal and Verbal Communication with Bosses, Peers, and Subordinates," *Journal of Applied Psychology*, 70 (1), 157-63
- Thompson, Debora V. and Michael I. Norton (2011), "The Social Utility of Feature Creep," *Journal of Marketing Research*, 48 (3), 555-65.
- Üstüner, Tuba and Douglas B. Holt (2010), "Toward a Theory of Status Consumption in Less Industrialized Countries," *Journal of Consumer Research*, 37 (June), 37-56.
- Veblen, Thorstein (1899/1994), *The Theory of the Leisure Class*, New York: Dover.
- Wang, Yajin and Vladas Griskevicius (2014), "Conspicuous Consumption, Relationships, and Rival: Women's Luxury Products as Signals to Other Women," *Journal of Consumer Research*, 40 (5), 834-54.
- White, Katherine, Bonnie Simpson, and Jennifer J. Argo (2014), "Out-Groups in Encouraging Positive Consumer Behaviors," *Journal of Marketing Research*, 51 (4), 433-47.
- Winterich, Karen P. and Yinlong Zhang (2014), "Accepting Inequality Deters Responsibility: How Power Distance Decrease ChariBehavior," *Journal of Consumer Research*, 41 (2), 274-93.
- Wong, Nancy Y. and Aaron C. Ahuvia (1998), "Personal Taste and Family Face: Luxury Consumption in Confucian and Western Societies," *Psychology & Marketing*, 15 (5), 423-41.
- Yang, Sha and Greg M. Allenby (2003), "Modeling Interdependent Consumer Preferences," *Journal of Marketing Research*, 40 (3), 282-49.
- Yoo, Boonghee, Naveen Donthu, and Tomasz Lenartowicz (2011), "Measuring Hofstede's Five Dimensions of Cultural Values at the Individual Level: Development and Validation of CVSCALE," *Journal of International Consumer Marketing*, 23 (3/4), 193-210.
- Zhang, Yinlong, Karen P. Winterich, and Vikas Mittal (2010), "Power Distance Belief and Impulsive Buying," *Journal of Marketing Research*, 47 (5), 945-54.