

## **Not All Discounts Are Created Equal: Power Distance Belief and Locus-of-Discount in A Bundle**

Offering a price discount when consumers purchase a bundle is a common marketing practice (Stremersch and Tellis 2002). For example, when consumers search for a coffee maker at Amazon.com, they often receive “package deal” recommendations (e.g., a bundle of the coffee maker and a milk frother) from the online store. In this particular bundle, a price discount can be offered on the coffee maker (the “focal” product) or the economically equivalent discount can also be offered on the milk frother (the “tie-in” product).

To date, little research has examined whether it is more effective to offer a discount on the focal or the tie-in product in a bundle (i.e., locus-of-discount). Also, despite the prevalence of bundling strategies in different countries, the role of culture has been underexplored. To fill these gaps, in this research we explore how the cultural orientation of power distance belief (PDB)—defined as the extent to which individuals in a society view, accept, and endorse power inequality and hierarchy (Zhang, Winterich, and Mittal 2010)—influences consumer preference for a bundle and why. We hypothesize that consumers with different levels of PDB value a bundle differently, depending on the locus-of-discount. We further hypothesize that the interactive effect of PDB and locus-of-discount on bundle attractiveness is driven by a greater discrimination tendency associated with high PDB.

While individuals with high PDB desire hierarchy and inequality, those with low PDB believe in equality and the absence of hierarchy. We propose that PDB enhances individuals’ tendency to discriminate and affects their attention allocation. Consistent with this argument, previous research (Nelson and Carson 1998) shows that students from high PDB countries pay more attention to the views of their teachers than those of their peers. In contrast, those from low PDB countries pay equal attention to feedback from both teachers and peers. Similarly, opinions of managers or leaders are more attended to than those of subordinates in high PDB cultures, but not in low PDB cultures (e.g., Huang, Van de Vliert, and Van der Vegt 2005).

The discrimination tendency associated with high PDB is also exhibited in nonsocial domains. For example, high (but not low) PDB consumers prefer national (vs. private) brands (Wang et al. 2020). As another example, using a celebrity enhances advertising effectiveness for high (but not low) PDB consumers (Winterich et al. 2018). Extending these findings to our context, we expect that high PDB consumers have a greater tendency to discriminate the focal product from the tie-in product, and hence pay more attention to the former. The enhanced attention to the focal product among high PDB consumers makes a discount on the focal product more noticeable than the same discount on the tie-in product. Therefore, the bundle will appear more attractive among high PDB consumers when a discount is offered on the focal product. However, since low PDB consumers devote similar amount of attention to the focal and tie-in products, a discount on either of them will be equally noticed. Therefore, low PDB consumers’ evaluation of the bundle should not be affected by the locus-of-discount.

Four studies provide convergent evidence in support of these hypothesized effects and the underlying process. **Study 1** ( $N=220$ ) employed a 2 (PDB: high vs. low)  $\times$  2 (locus-of-discount: focal vs. tie-in) between-subjects design. PDB was primed through a writing task (Zhang et al. 2010). Those assigned to the high [low] PDB condition were asked to list three reasons for [against] 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.*” Next, participants were asked to imagine that they are planning to buy a 12" pizza and run across a bundle of a 12" pizza

that they like and a dozen chicken wings. Locus-of-discount was manipulated by offering a \$2 discount either on the pizza (the focal product; regular price \$9.99) or the wings (the tie-in product; regular price \$5.99). The dependent variable was a 3-item measure of purchase intention of the bundle ( $\alpha=.95$ ). As predicted, there was a significant PDB  $\times$  locus-of-discount interaction on purchase intention ( $F(1,216)=5.74, p=.02$ ). Planned contrasts revealed that participants in the high PDB condition had a higher purchase intention when the locus-of-discount was on the focal ( $M=4.16$ ) than on the tie-in ( $M=3.21; t(107)=-2.65, p=.01$ ) product. In contrast, those in the low PDB condition were equally likely to purchase the product, regardless of the locus-of-discount ( $M_{\text{Focal}}=3.73$  vs.  $M_{\text{Tie-in}}=4.06; t(109)=.83, p=.41$ ).

**Study 2** ( $N=277$ ) extended Study 1 in three ways: (1) the products were equally priced (\$6.99) to eliminate possible confounds, (2) we used a behavioral measure to capture consumer real preference, and (3) we measured tendency to discriminate and tested its mediation effect. The procedures, PDB manipulation, and purchase intention measures are the same as in Study 1. After purchase intention was measured, participants were told that they have a chance to enter a lottery in lieu of the monetary remuneration promised, and the winners will receive a gift certificate to purchase the same bundle shown in the scenario. Participants' willingness to join the lottery (0=*not at all*; 100=*very much*) was measured. Thereafter, consumers' tendency to discriminate was measured by a 3-item scale ( $\alpha=.73$ ), including items such as "*At that time, I easily sorted the pizza and the chicken wings according to their importance.*"

Replicating the results of Study 1, there was a significant PDB  $\times$  locus-of-discount interaction on purchase intention ( $F(1,273)=3.92, p=.05$ ). Planned contrasts revealed that participants in the high PDB condition were significantly more likely to purchase the product when the discount was applied to the focal ( $M=5.16$ ), compared to the tie-in ( $M=3.98; t(139)=3.77, p=.00$ ) product. In contrast, participants in the low PDB condition were not influenced by the locus-of-discount ( $M_{\text{Focal}}=5.01$  vs.  $M_{\text{Tie-in}}=4.70; t(134)=1.01, p=.31$ ). In addition, these effects were mediated by consumers' tendency to discriminate ( $\beta=.18$ ; 95% CI=[.02, .41]). Moreover, consumers' willingness to join the lottery was mediated by tendency to discriminate and purchase intention ( $\beta=.73$ ; 95% CI=[.05, 2.07]).

In the next two studies, we examine the boundary conditions of the core effect by manipulating the tendency to discriminate. According to our theorizing, the interaction effect we have documented so far is due to high PDB consumers' tendency to discriminate against a tie-in product. Therefore, when tendency to discriminate is situationally enhanced, low PDB consumers—whose baseline discrimination tendency is low and therefore has a potential to increase—should behave more like high PDB consumers and lower their purchase intention of the bundle with a discounted tie-in product. In contrast, high PDB consumers' baseline discrimination tendency is already high and therefore may be difficult to increase further ("ceiling effect"). Hence, their purchase intention should be less affected. On the contrary, when tendency to discriminate is situationally reduced, high PDB consumers—whose baseline discrimination tendency is high and has a greater potential to decrease—should behave more like low PDB consumers and increase their purchase intention of the bundle with a discounted tie-in product. However, such an effect is less likely to appear for low PDB consumers, whose discrimination tendency is already low and may not decrease further ("floor effect").

To test these predictions, **Study 3** ( $N=440$ ) adopted a 2 (PDB: high vs. low)  $\times$  2 (locus-of-discount: focal vs. tie-in)  $\times$  3 (tendency to discriminate: enhanced, reduced, control) between-subjects design. PDB was primed by asking participants to endorse a cultural awareness movement. Those assigned to the high [low] PDB condition were asked to support a movement

about social hierarchy [equality]. Thereafter, participants' tendency to discriminate was manipulated. Those assigned to the discrimination tendency enhanced [reduced] condition were asked to list dissimilarities [similarities] of six pairs of objects (e.g., a bus and a car). A bundle containing a coffee maker (the focal product) and a milk frother (the tie-in product) was used to manipulate locus-of-discount, through offering a \$15 discount either on the coffee maker (\$59.97) or the milk frother (\$29.97). Purchase intention was measured as in Study 1.

As predicted, a 2 (PDB)  $\times$  2 (locus-of-discount)  $\times$  3 (tendency to discriminate) ANOVA on purchase intention revealed a significant three-way interaction ( $F(2, 428)=3.32, p=.04$ ). Separate analyses on the discrimination-enhanced and the control conditions revealed that enhancing the tendency to discriminate decreased low PDB participants' purchase intention when the locus-of-discount was the tie-in product ( $M_{\text{enhanced}}=3.05$  vs.  $M_{\text{control}}=3.99; t(64)=-2.60, p=.01$ ), and not when the locus-of-discount was the focal product ( $M_{\text{enhanced}}=4.14$  vs.  $M_{\text{control}}=3.73; t(76)=.95, p=.35$ ). However, enhancing the tendency to discriminate did not affect high PDB participants' purchase intention regardless of whether the locus-of-discount was the tie-in product ( $M_{\text{enhanced}}=3.21$  vs.  $M_{\text{control}}=2.94; t(70)=.69, p=.49$ ) or the focal product ( $M_{\text{enhanced}}=4.05$  vs.  $M_{\text{control}}=4.19; t(71)=-.38, p=.70$ ).

In the discrimination-reduced and the control conditions, reducing the tendency to discriminate increased high PDB participants' purchase intention when the locus-of-discount was the tie-in product ( $M_{\text{reduced}}=4.13$  vs.  $M_{\text{control}}=2.94; t(79)=2.94, p=.01$ ), and not when the locus-of-discount was the focal product ( $M_{\text{reduced}}=3.90$  vs.  $M_{\text{control}}=4.19; t(65)=-.70, p=.49$ ). However, reducing the tendency to discriminate did not affect low PDB participants' purchase intention regardless of whether the locus-of-discount was the tie-in product ( $M_{\text{reduced}}=3.68$  vs.  $M_{\text{control}}=3.99; t(74)=-.78, p=.44$ ) or the focal product ( $M_{\text{reduced}}=3.80$  vs.  $M_{\text{control}}=3.73; t(70)=.16, p=.87$ ). These results support our predictions and provide further evidence of the mediating role played by tendency to discriminate through a moderation-of-process approach (Spencer et al. 2005).

Finally, we test the effect of tendency to discriminate again using a managerially relevant manipulation of brand names. Towards this end, **Study 4** ( $N=416$ ) employed a 2 (PDB: high vs. low)  $\times$  2 (locus-of-discount: focal vs. tie-in)  $\times$  3 (brand consistency: inconsistent, consistent, control) between-subjects design. In the control condition (no brand name), the bundle and price discount were the same as in Study 3. In the brand inconsistent [consistent] condition, the fictional brand names of the two products in the bundle are made salient and different (KiTech and Chefcart for the coffee maker and the milk frother, respectively) [the same; KiTech]. We predict that the prime of brand names (inconsistent, consistent, and control) should yield effects that correspond to priming tendency to discriminate (enhanced, reduced, and control, respectively).

Supporting our predictions, a 2 (PDB)  $\times$  2 (locus-of-discount)  $\times$  3 (brand consistency) ANOVA revealed a significant three-way interaction ( $F(2, 404)=3.39, p=.04$ ). Separate analyses on the brand-inconsistency and the control conditions revealed that brand-inconsistency reduced low PDB participants' purchase intention when the locus-of-discount was the tie-in product ( $M_{\text{inconsistent}}=2.88$  vs.  $M_{\text{control}}=4.32; t(56)=-3.63, p=.00$ ), and not when the locus-of-discount was the focal product ( $M_{\text{inconsistent}}=4.00$  vs.  $M_{\text{control}}=4.05; t(84)=-.16, p=.87$ ). Brand-inconsistency, however, did not affect high PDB participants' purchase intention regardless of whether the locus-of-discount was the tie-in product ( $M_{\text{inconsistent}}=3.23$  vs.  $M_{\text{control}}=3.07; t(52)=.41, p=.69$ ) or the focal product ( $M_{\text{inconsistent}}=4.08$  vs.  $M_{\text{control}}=4.30; t(70)=-.57, p=.57$ ).

In the brand-consistency and control conditions, brand-consistency enhanced high PDB

participants' purchase intention when the locus-of-discount was the tie-in product ( $M_{\text{consistent}}=4.21$  vs.  $M_{\text{control}}=3.07$ ;  $t(67)=2.90$ ,  $p=.01$ ), and not when the locus-of-discount was the focal product ( $M_{\text{consistent}}=4.10$  vs.  $M_{\text{control}}=4.30$ ;  $t(64)=-.59$ ,  $p=.56$ ). Brand-consistency, on the contrary, did not affect low PDB participants' purchase intention regardless of whether the locus-of-discount was the tie-in product ( $M_{\text{consistent}}=4.13$  vs.  $M_{\text{control}}=4.32$ ;  $t(79)=-.49$ ,  $p=.63$ ) or the focal product ( $M_{\text{consistent}}=4.19$  vs.  $M_{\text{control}}=4.05$ ;  $t(69)=.41$ ,  $p=.68$ ). These results conceptually replicate those in Study 3 by manipulating the tendency to discriminate through brand names.

Combined, the results from the four studies (see Table 1) provide robust support to our predictions that high PDB consumers prefer a discount on the focal (vs. tie-in) product in a bundle, whereas low PDB consumers' preferences are not affected by the locus-of-discount. We additionally demonstrate the mechanism underlying this effect that is due to tendency to discriminate, by showing its mediating and moderating effects. We also identify brand consistency as a managerially relevant boundary condition for the effect of PDB on bundle preferences associated with the locus-of-discount.

Our research contributes to the literature in three significant ways: (1) it represents a first attempt to examine the impact of PDB on consumers' preference for locus-of-discount in a bundle, (2) it provides evidence for the underlying mechanism for the core effect and uncovers a new qualitative difference between high and low PDB individuals, namely tendency to discriminate, and (3) it identifies brand names as a tool that marketers can utilize to enhance the promotional effectiveness of bundles.

## REFERENCES

- Huang, X., Van de Vliert, E., & Van der Vegt, G. (2005). Breaking the silence culture: Stimulation of participation and employee opinion withholding cross-nationally. *Management and Organization Review*, 1(3), 459-482.
- Nelson, G. L., & Carson, J. G. (1998). ESL students' perceptions of effectiveness in peer response groups. *Journal of second language writing*, 7(2), 113-131.
- Spencer, S. J., Zanna, M. P., & Fong, G. T. (2005). Establishing a causal chain: why experiments are often more effective than mediational analyses in examining psychological processes. *Journal of personality and social psychology*, 89(6), 845.
- Stremersch, S., & Tellis, G. J. (2002). Strategic bundling of products and prices: A new synthesis for marketing. *Journal of marketing*, 66(1), 55-72.
- Wang, J. J., Torelli, C. J., & Lalwani, A. K. (2020). The interactive effect of power distance belief and consumers' status on preference for national (vs. private-label) brands. *Journal of Business Research*, 107, 1-12.
- Winterich, K. P., Gangwar, M., & Grewal, R. (2018). When celebrities count: Power distance beliefs and celebrity endorsements. *Journal of Marketing*, 82(3), 70-86.
- Zhang, Y., Winterich, K. P., & Mittal, V. (2010). Power distance belief and impulsive buying. *Journal of Marketing Research*, 47(5), 945-954.