Effect of downward line extension on consumers’ purchase intentions: power distance belief as a moderator

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Abstract

Purpose – Downward line extension is a valuable growth strategy that enables multiple products and services to meet diverse customer needs. However, downward extended products launched by high-status brands may be challenged by horizontal extended products launched by relatively low-status brands when these two types of products target similar consumers. This study aims to examine the impact of product type (horizontal extended versus downward extended) on consumers’ purchase intentions, the underlying mechanism and the moderating role of power distance belief.

Design/methodology/approach – Four scenario-based experiments were conducted to probe the research questions.

Findings – Consumers develop lower purchase intentions for downward (versus horizontal) extended products due to the reduction of perceived fit and self-congruity (Study 1). Beyond that, power distance belief moderates the impact of product type on consumers’ purchase intentions, as a low power distance belief reduces the negative effect of downward line extension (Studies 2a, 2b and 2c). Perceived fit and self-congruity mediate the interaction effect between product type and power distance belief on consumers’ purchase intentions (Study 2c).

Practical implications – This study provides marketing practitioners with guidance on implementing the strategy of downward line extension.

Originality/value – This study serves as a preliminary effort to compare consumers’ responses between downward and horizontal extended products, which deepens the understanding of downward line extension. It also contributes to the body of knowledge about line extension and power distance belief by demonstrating the moderating role of power distance belief in a line extension context.

Keywords Downward line extension, Power distance belief, Schema theory, Perceived fit, Self-congruity, Purchase intentions

Paper type Research paper

1. Introduction

In times of economic crisis and uncertainty, consumers tend to exhibit risk-averse behavior, exercising caution in their spending decisions and displaying price-consciousness. Companies are trying to adapt to this new trend. Given the inherent risks associated with introducing new brands, many businesses prefer vertical line extension, which extends brands to different price and quality levels within the same product category (Cho and Janda, 2023; Schmitz et al., 2023). Downward line extension, a type of vertical line extension, refers to a new product launched by a parent brand in the same category but at a lower price and/or quality level (Boisvert and Ashill, 2018; Hultman et al., 2021; Schmitz et al., 2023). Many high-status brands adopt the strategy of downward line extension to launch new products to develop new market segments and boost sales. For instance, Maotai wine, which is perceived as a symbol of power and luxury in China, launched Maotai Prince wine that is aimed at the middle market; Parker pen, dubbed the “king of the pens,” sells its mass-market pens for under $3 each. It is suggested that downward line extension leads to the popularization or democratization of luxury goods (Shirai, 2022), covers broader consumer segments (Goetz et al., 2014), meets high market demand for cost-effective products (Shirai, 2022) and affects consumers’ purchase intentions (Zeng et al., 2019).

However, new products launched by high-status brands through downward line extension are highly likely to be challenged by products introduced by relatively low-status brands through horizontal line extension, as long as these two types of products are identically priced to target the same

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market segment. For example, the sales of Maotai Prince wine are influenced by other liquor products offered by relatively low-status brands such as Langjiu, Xijiu and Lai Mao, all of which sell sauce-based liquors at prices comparable to that of Maotai Prince wine. In contrast, the existing literature has primarily compared downward line extension with other extension strategies (e.g. upward and horizontal line extensions) for the same brand (Boisvert and Ashill, 2018, 2022; Childs et al., 2018; Hultman et al., 2021; Shirai, 2022).

There is little research in the academic literature on whether consumers respond differently to a downward extended product launched by a high-status brand and a horizontal extended product launched by a relatively low-status brand with a similar price. To fill this gap, this study has been undertaken.

As schema theory provides a theoretical basis for extension evaluation (Allman et al., 2016; Su and Kunkel, 2019), this study explores the relationship between these two types of products and consumers’ purchase intentions by introducing perceived fit as a potential mediator. It has been demonstrated that perceived fit is positively correlated with extension evaluation and consumers’ purchase intentions (Choi et al., 2010; Hill and Lee, 2015; Zeng et al., 2019; Zheng et al., 2019). Moreover, self-congruity, which refers to the consistency between an individual’s self-image and a brand’s image, plays a crucial role in brand evaluation (Li et al., 2022; Rabbanee et al., 2020). Due to the demotion of status, a downward extended product launched by a high-status brand may result in lower perceived fit and self-congruity, and thereby, lead to lower purchase intentions than a horizontal extended product launched by a relatively low-status brand when these two types of products are identically priced.

More importantly, to overcome the disadvantages of downward line extension, this study identifies power distance belief as a boundary condition for the product type to affect consumers’ purchase intentions. In the prior literature, little attention has been paid to how to mitigate the negative effect of downward line extension from the perspective of personality traits, especially power distance belief. Power distance belief is defined as the extent to which people accept and expect power hierarchies and inequalities (Oyserman, 2006). Status differences are perceived differently by consumers based on their power distance belief (Kim and Zhang, 2014). Consumers with high power distance belief are often aware of their social status as a result of their sensitivity to status differences, which motivates them to actively seek ways to maintain or improve their status (Gao et al., 2016; Kim and Zhang, 2014; Wang et al., 2020), whereas consumers with low power distance belief are less sensitive to differences in status (Cui et al., 2020). It follows that power distance belief may serve as a moderator of downward line extension. Specifically, low power distance belief may alleviate the negative impact of downward line extension.

Based on the aforementioned information, this study aims to address the gaps in the literature by examining the impact of product type (horizontal extended versus downward extended) on consumers’ purchase intentions, the underlying mechanisms and the moderating role of power distance belief. Four studies were conducted to test the hypotheses. Specifically, Study 1 examined the effect of product type on consumers’ purchase intentions, as well as the mediating roles of perceived fit and self-congruity. Study 2a investigated the moderating effect of power distance belief by measuring it as a chronic trait, while Study 2b explored the moderating effect of power distance belief by manipulating it as a situational trait. Study 2c further examined the moderating role of power distance belief and the underlying psychological mechanisms (i.e. perceived fit and self-congruity). This study deepens the understanding of the negative impacts of downward line extension and demonstrates the significant role of power distance belief in reducing these negative impacts. Overall, the study contributes to the body of knowledge on line extension and power distance belief, which will be helpful to marketers interested in implementing the strategy of downward line extension.

2. Literature review

2.1 Downward line extension

Line extension refers to the application of a parent brand name to a new product within a product category already served by the parent brand (Aaker and Keller, 1990; Peng et al., 2023; Schmitz et al., 2023). Line extension can be distinguished into two forms: horizontal and vertical line extensions. Horizontal line extension involves introducing products with the same price and quality level in the same product category (e.g. adding a new flavor) (Heath et al., 2011; Lee and Cho, 2023), while vertical line extension involves introducing products at different prices and quality points while retaining the same product category (Lei et al., 2008; Schmitz et al., 2023). Vertical line extension includes downward and upward line extensions based on the extension direction: downward line extension refers to the use of the same brand to launch a product at a comparatively lower quality and price point within an existing product category; the opposite is true for upward line extension (Hultman et al., 2021; Lei et al., 2008; Schmitz et al., 2023).

Downward line extension has received considerable attention in the literature (Hao et al., 2020; He and Li, 2010; Hultman et al., 2021; Lei et al., 2008; Pontes et al., 2017). On the one hand, the notable advantages of downward line extension have been demonstrated in previous studies. In comparison with an upward line extension, downward line extension lowers the performance and financial risks (Lei et al., 2008). Downward line extension has positive effects on perceived values for money (Goetz et al., 2014). The perceived attributes and attitudes of the parent brand have positive impacts on the perceived value of the extension and subsequent intention to (re)visit the extended brand, and these positive relationships are stronger for downward line extension than upward line extension (Hultman et al., 2021). In addition, consumers evaluate a brand’s downward line extension more favorably than its upward line extension because the transfer of manufacturing skills is easier for downward line extension (Hao et al., 2020).

On the other hand, there are some disadvantages associated with downward line extension as well (Heath et al., 2011; Mingione et al., 2017; Palmeira et al., 2019). Downward line extension can reduce brand evaluation, while upward line extension can enhance it (Heath et al., 2011). It is suggested that downward line extension has a stronger negative impact on
luxury brands’ brand commitment than on functional ones (Mingione et al., 2017). Consumers’ positive perceptions of luxury brands generate negative attitudes toward their downward line extensions because downward line extensions are perceived to reduce brand strength (Margariti et al., 2019). Moreover, consumers hold less positive attitudes and express lower purchase intention toward downward line extension originating from a luxury car brand than from a luxury fashion brand (Dall’Olmo Riley et al., 2013).

2.2 Categorization theory and schema theory
Categorization theory refers to the way consumers categorize new products by comparing them to the market information about the parent brand already stored in their memories (Loken and John, 1993; Quamina et al., 2023; Sujan and Dekleva, 1987). According to categorization theory, parent brands are associated with a specific set of attributes, and brand family categories are formed in consumers’ minds as new extensions are introduced (Childs et al., 2018; He et al., 2023; Kim et al., 2001). As part of categorization theory, schema theory proposes that brand knowledge is organized by consumers in memory-based structures called schemas (Bettman, 1979; Sujan and Bettman, 1989). A schema is a cognitive structure that represents knowledge about a concept or a type of stimulus, including its attributes and the relationships among those attributes (Fiske and Taylor, 1991). Consumers form schemas based on brand associations (e.g., information stored in their minds about brands) to construct brand images and identities (Puligadda et al., 2012).

Schema theory provides a theoretical basis for extension evaluation (Allman et al., 2019; Phau et al., 2020). Both category and image schemas contain various brand associations that may trigger consumer responses to brand marketing (Puligadda et al., 2012). Brand image retention is a dynamic process involving evaluating a brand image by absorbing and adapting to new brand associations (Pitta and Prevel Katsanis, 1995). Prior experiences shape certain schemas (i.e., set of expectations) in consumers’ minds, guiding their evaluation of new stimuli, such as extensions (Dwivedi and Merrilees, 2013). The literature has identified three models—bookkeeping, subtyping and conversion—that predict schema changes in response to incongruent information (Weber and Crocker, 1983). Following schema theory, the congruence between the parent brand schema and new brand-relevant information regarding the extension plays a central role in determining how the extension will affect consumer responses (Allman et al., 2019; Mandler, 1982).

2.3 Power distance belief
Power distance belief can be assessed at a national level (Brockner et al., 2001), manifested at an individual level (Gao et al., 2016; Zhang et al., 2010) or activated temporarily (He et al., 2023; Zhang et al., 2010). Power distance at the national level can be defined as the extent to which society expects and accepts inequality in power distribution (Brockner et al., 2001). Power distance belief at the individual level refers to a person’s acceptance and expectation of status hierarchies and power differences (Oyserman, 2006; Zhang et al., 2010). Considering that this study is focused on individuals, it examines power distance belief as a personality trait at an individual level. It is important to note that power distance belief does not describe the actual power gap experienced by individuals or the actual degree of power they possess, but rather their attitude toward power differences in social interactions (Oyserman, 2006; Winterich and Zhang, 2014).

Specifically, individuals with high power distance belief accept inequality among people, believe that social hierarchies are inevitable and reasonable, and tend to conform to, support and maintain them (Oyserman, 2006). They believe that everyone has a proper place in the social hierarchy and that individuals will act in accordance with their societal position and maintain the current distribution of power (Gao et al., 2016; Kim and Zhang, 2014; Winterich and Zhang, 2014). In this sense, they tend to place themselves in a vertical relationship in interpersonal interactions, comparing and judging themselves with others in terms of status (Gao et al., 2016). Therefore, they attach greater importance to their social status and are sensitive to status differences.

Individuals with low power distance belief believe that everyone is created equal, that freedom and equality are extremely significant and that social hierarchy is unreasonable. This suggests that they attempt to minimize inequality as much as possible when it occurs in society (Jiang et al., 2021; Oyserman, 2006). They tend to position themselves in a horizontal interpersonal relationship where everyone is on an equitable footing and maintain a low sensitivity to status differences. In recent years, researchers in marketing are becoming increasingly interested in how power distance belief influences consumer behavior (Gao and Zhang, 2022; Jiang et al., 2021; Luo and Mattila, 2020; Wang et al., 2018).

3. Hypotheses development
3.1 Product type and purchase intentions
The present study aims to examine the impact of product type (horizontal extended versus downward extended) on consumers’ purchase intentions. In this study, horizontal extended products refer to products introduced by a low-status brand through horizontal line extension, whereas downward extended products are new products introduced by a relatively high-status brand through downward line extension. These two types of products are aimed at similar consumers and offered at the same price.

The high-status parent brand of downward extended products is associated with specific high-end brand cues such as extraordinary quality and premium pricing. By contrast, the downward extended products launched by high-status brands are typically linked to mass clues such as lower price and quality. This indicates that downward extended products may be evaluated negatively by consumers because they perceive a high-status brand as less valuable and attractive when its products become less expensive (Childs et al., 2018). Furthermore, given that high-status brands are supposed to distance themselves from customers and appear exclusive and inaccessible (Margariti et al., 2019), downward line extensions could weaken their high-end image (e.g., exclusivity and premium price), resulting in a negative perception of the downward extended product (Shirai, 2022). The incongruity between downward extended products and their high-status
parent brands may hurt consumer perceptions (e.g. symbolic benefits and customer experience) and lead to reduced purchase intentions (Margariti et al., 2019).

In contrast, horizontal extended products share the same characteristics as their low-status parent brands, such as low price and low quality. Consumers are likely to perceive a high degree of congruity between horizontal extended products and their low-status parent brands, thus associating the positive characteristics of the parent brands (e.g. brand reputation, manufacturing skills and product quality) with the horizontal extended products (Puligadda et al., 2012; Su and Kunkel, 2019). Built upon the above arguments, downward (versus horizontal) extended products may be perceived negatively by consumers, resulting in lower purchase intentions. Taken together, the following hypothesis is proposed:

H1. Consumers’ purchase intentions for downward extended products are lower than those for horizontal extended products.

3.2 Mediating role of perceived fit

Grounded in schema theory (Allman et al., 2016; Su and Kunkel, 2019), perceived fit is conceptualized as the degree to which consumers perceive similarities between a newly extended product and its parent brand (Dall’Olmo Riley et al., 2015). Fit is regarded as one of the most crucial factors in the success of brand extension (Osorio et al., 2022), as well as an important condition for a positive consumer response (Peng et al., 2023). Consumers will spontaneously evaluate similarities between the original brand and its extended brand when evaluating extension, and the perceived fit is a manifestation of similarity transmission. In particular, product category similarity and brand concept similarity are key determinants of perceived fit (Dall’Olmo Riley et al., 2015). Previous studies have demonstrated the positive effects of perceived fit. Specifically, perceived fit positively influences the evaluation of vertical line extension (He and Li, 2010; He et al., 2023), consumers’ purchase intentions toward the extended products (Dimitriu et al., 2017; He et al., 2023; Hill and Lee, 2015) and the probability of purchasing co-branded products (Suzuki and Kanno, 2022).

In the context of line extension, high-status brands convey an image of being expensive, rare and high-quality. In contrast, when a high-status brand launches new products through downward line extension to target the middle-end market, the image of the downward extended products is associated with relatively low quality and low price. The images and market positions of downward extended products are extremely inconsistent with those of their high-status parent brands, indicating few similarities between them (Dall’Olmo Riley et al., 2015). Consequently, consumers may perceive a low level of fit between high-status brands and their downward extended products (Stumpf and Baum, 2016), which negatively affects their purchase intentions (Hill and Lee, 2015).

By contrast, the images and market positions of horizontal extended products and their low-status parent brands are highly consistent, as they target the same market segment with the same price and quality. Accordingly, there is a strong association between the horizontal extended products and their low-status parent brands, and consumers may perceive a high level of fit between them. The perceptions of fit enable the transfer of positive associations with the parent brand to its horizontal extended products, boost the trust in the performance of the products (Dimitriu et al., 2017), and finally increase consumers’ purchase intentions toward the products (Hill and Lee, 2015). Taken together, downward extended products engender lower perceived fit compared to horizontal extended products, which leads to lower purchase intentions. In summary, the hypothesis is proposed as follows:

H2. Perceived fit mediates the effect of product type on consumers’ purchase intentions.

3.3 Mediating role of self-congruity

Self-concept theory holds that an individual will spontaneously associate the objective subject with the self-concept in the psychological process of internalizing external information and form a judgment about the degree of match between the self-concept and the objective subject (Sirgy, 1982). In brand research, self-congruity is defined as consumers’ cognitive judgment and emotional experience on the congruity between self-concept and brand core values (Aw et al., 2021; Sirgy et al., 2008). It explains how a brand attracts consumers who match its value concept through its symbolic meaning (Malär et al., 2011). Consumers buy a brand not only for its functional benefits but also for the symbolic meaning embedded behind the brand. It is common for consumers to express their values and self-image with the brands and products they own or consume, and products and brands can become consumers’ extended selves (Mittal, 2006). Consequently, self-congruity theory has been widely used to explain consumer behavior (Sirgy, 1982). It is established that self-congruity positively influences brand attachment (Rabbane et al., 2020), perceived value-for-money (Baker et al., 2020), brand evaluations (Bajac et al., 2018) and purchase intentions (Aw et al., 2021).

When making mass consumption, consumers would consider financial responsibility and budget orientation to be facets of their self-image (Baker et al., 2020). Downward extended products are generally mass products targeted at the middle-end market, whereas their parent brand is a high-status brand targeted at the high-end market (Dall’Olmo Riley et al., 2013; Lei et al., 2008). Hence, the market position of downward extended products, which is inconsistent with that of their parent brand, is less recognizable to consumers. Given the incongruity between downward extended products and their high-end parent brands, consumers may perceive the image of downward extended products to be ambiguous, making it difficult for them to demonstrate their financial responsibility and budget orientation and resulting in decreased perceptions of self-congruity (Baker et al., 2020).

In contrast to downward extended products, the market position of horizontal extended products is consistent with that of their parent brand, as they both target the middle-end market (Heath et al., 2011; Schmitz et al., 2023). This indicates that consumers perceive the image of horizontal extended
products to be clear. In this sense, horizontal extended products can be used to demonstrate financial responsibility and budget orientation, which enable consumers to perceive consistency between their self-concept and brand core values (Aw et al., 2021; Rabbane et al., 2020). In consequence, downward extended products induce lower self-congruity compared to horizontal extended products, thereby decreasing consumers’ purchase intentions (Aw et al., 2021; Baker et al., 2020). As discussed, the following hypothesis is proposed:

**H3.** Self-congruity mediates the effect of product type on consumers’ purchase intentions.

### 3.4 Moderating role of power distance belief

People seek, express, confirm and ascertain a sense of being through what they have (Belk, 1988). In this sense, products and brands can become consumers’ extended selves (Mittal, 2006). This explains why consumers with different power distance belief will extend their views to the product and brand, and consequently exhibit a variety of reactions (Gao et al., 2016; Kim and Zhang, 2014; Toma and Hancock, 2013).

Downward extended products flow from high to low status in the social hierarchy, leading consumers with high power distance belief to be attentive to the psychological losses resulting from the demotion of product status because they are more sensitive to status differences (Gao et al., 2016; Jiang et al., 2021; Kim and Zhang, 2014) and more inclined to maintain social hierarchies (Han et al., 2017; Winterich and Zhang, 2014). The status reduction resulting from the downward line extension is incompatible with the status promotion or status maintenance mentality of consumers with high power distance belief. This implies that those consumers may perceive a low level of fit between a downward extended product and its parent brand due to the status discrepancy between them (Osinio et al., 2022; Suzuki and Kanno, 2022).

Conversely, the market position of horizontal extended products is in line with a relatively low-status brand, signaling status maintenance and a high level of fit between the product and brand. It follows that consumers with high power distance belief are likely to sense a lower perceived fit for downward (versus horizontal) extended products, which leads to lower purchase intentions.

Meanwhile, the decline of the market position of downward extended products signals that the structure and the image of these products are unstable and ambiguous, counteracting the mindset of consumers with high power distance belief because they have a greater need for structure – the desire for clarity and order, and the avoidance of ambiguity and gray areas (Lalwani and Forcum, 2016). Given the decreased market position and the disruption of order, these consumers may perceive a low level of self-congruity because the brand value does not match their self-concept (Han et al., 2017; Winterich and Zhang, 2014). In contrast, the market position of horizontal extended products remains unchanged, signaling a stable and clear image as well as the maintenance of status and order, all of which may enhance consumers’ perception of self-congruity. Therefore, consumers with high power distance belief perceive lower self-congruity and thereby exhibit lower purchase intentions for downward extended products than horizontal extended products (Aw et al., 2021).

By contrast, consumers with low power distance belief are less likely to be attentive to status loss when a high-status brand launches a downward extended product because they possess equality mindsets, maintain a lower sensitivity to status differences and make efforts to reduce inequality (Cui et al., 2020; Gao and Zhang, 2022). In this sense, they may think that it is appropriate for high-status brands to launch relatively low-status products. They still perceive a sense of fit between high-status parent brands and their downward extended products even though the status is altered. Likewise, they would perceive a high level of fit for horizontal extended products because the market positions of horizontal extended products and their parent brand are consistent. In conclusion, consumers with low power distance belief develop similar levels of perceived fit and purchase intentions for downward and horizontal extended products.

Consumers with low power distance belief care more about whether the products are economical and affordable when buying mass products, and pay less attention to the variation of the market position in downward extended products, as they maintain a lower sensitivity to status differences (Cui et al., 2020; Gao and Zhang, 2022) and have less need for structure and order (Lalwani and Forcum, 2016). The flow of status has little impact on their perceived match between the brand value and their self-concept. In other words, they would always perceive strong self-congruity regardless of market position changes. It follows that downward and horizontal extended products would be perceived with similar levels of self-congruity by consumers with low power distance belief, resulting in similar purchase intentions (Aw et al., 2021). Taken together, the following hypotheses were proposed:

**H4.** Power distance belief moderates the effect of product type on consumers’ purchase intentions. Specifically, consumers with high power distance belief show lower purchase intentions for downward (versus horizontal) extended products, whereas consumers with low power distance belief do not differ in their purchase intentions for these two types of products.

**H5.** Perceived fit mediates the interaction effect between power distance belief and product type on consumers’ purchase intentions.

**H6.** Self-congruity mediates the interaction effect between power distance belief and product type on consumers’ purchase intentions.

### 4. Study 1

Study 1 aimed to verify the effect of product type on consumers’ purchase intentions and the mediating role of perceived fit and self-congruity in the relationship between product type and consumers’ purchase intentions.

#### 4.1 Participants and design

Study 1 involved 196 participants (18–67 years, 70 males, $M_{age} = 32.83, SD = 7.94$) in an online questionnaire.
and downward extended products were similar \( P(1,194) = 0.0001 \). The market positions of the horizontal extended product versus downward extended were similar. Following the survey’s completion, each participant received a nominal fee of 2 RMB.

4.2 Material and procedure
To avoid the impact of participants’ prior brand experience and product knowledge on real brands and products, a fictitious brand named Versus Kein (VK) was designed. Photoshop was used to process the image of a white unisex cotton T-shirt. Brand and product descriptions (e.g., price, quality, and market position) were used to manipulate the product type. The scenario for the horizontal extended product emphasized the popularity and affordability of the parent brand VK and the newly introduced product, which were both aimed at the middle-end market. In contrast, the scenario for the downward extended product depicted the parent brand VK as a symbol of identity and status and aimed at the high-end market; whereas the newly launched product was portrayed as affordable, popular and aimed at the middle-end market. It is noteworthy that the descriptions for the new products were identical across scenarios. Before the formal experiment, a pretest was conducted to verify the materials. The results of the pretest showed that the experimental materials were suitable for the formal experiment (see Appendix).

In the formal experiment, participants were asked to peruse the description and picture of a T-shirt presented to them before filling out questionnaires with questions about purchase intentions (2 = 0.706) (Dodd et al., 1991), perceived fit (2 = 0.842) (Goedertier et al., 2015) and self-congruity (2 = 0.856) (Baker et al., 2020). All questions were measured on a seven-point Likert scale. Subsequently, the experimental materials were subjected to manipulation checks. Participants had to evaluate the market position of the parent brand and the new product on two items (budget/luxury and function/prestige) on a seven-point Likert scale (Dall’Olmo Riley et al., 2013; Lei et al., 2008). Finally, participants were asked to provide some basic personal information (e.g., gender, age, education, monthly income and occupation).

4.3 Results and discussion
4.3.1 Manipulation checks
The results indicated that the market position of the horizontal extended product and its low-status parent brand were consistent \([M_{\text{low-status parent brand}} = 2.363, M_{\text{horizontal extended product}} = 2.217, F(1,194) = 1.405, p = 0.237]\). However, the marketing position of the downward extended product was significantly lower than its high-status parent brand \([M_{\text{high-status parent brand}} = 6.183, M_{\text{downward extended product}} = 2.278, F(1,194) = 851.063, p < 0.001]\). The market positions of the horizontal extended and downward extended products were similar \([F(1,194) = 0.169, p = 0.681]\), whereas that of the low-status (versus high-status) parent brand were significantly lower \([F(1,194) = 677.178, p < 0.001]\). It can be seen that the manipulation of the product type was successful.

4.3.2 Main effect
There were significant differences in consumers’ purchase intentions depending on the product type, with consumers’ purchase intentions for the downward (versus horizontal) extended product being significantly lower \([M_{\text{horizontal extended product}} = 6.009, M_{\text{downward extended product}} = 5.800, F(1,194) = 4.195, p = 0.042]\). \( H1 \) is supported.

4.3.3 Mediation effect
A 95% bias-corrected bootstrapping analysis with 5,000 samples (Process Model 4) was used to test the mediating paths. Perceived fit and self-congruity were entered into the model simultaneously. The indirect effect of the product type on consumers’ purchase intentions through perceived fit \((b = -0.1207, LLLI = -0.2401, UUCI = -0.0145)\) and self-congruity \((b = -0.1094, LLLI = -0.2500, UUCI = -0.0170)\) were significant. \( H2 \) and \( H3 \) are supported.

4.3.4 Discussion
The findings of Study 1 provided initial evidence that product type had a significant effect on consumers’ purchase intentions, with consumers’ purchase intentions for downward (versus horizontal) extended products being significantly lower. It also demonstrated that perceived fit and self-congruity were joint mediators in the relationship between product type and consumers’ purchase intentions. The findings of Study 1 raise the following question: How to alleviate the negative impact of downward line extension? To address this issue, the following studies were conducted to test the individual difference factor, power distance belief, as a boundary condition for the aforementioned effect.

5. Study 2
5.1 Study 2a
5.1.1 Participants and design
In Study 2a, 174 participants (18–59 years, 67 males, \( M_{\text{age}} = 30.63, SD = 8.16 \)) from Credamo were randomly assigned to conditions in a single-factor between-subjects design (product type: horizontal extended versus downward extended).

5.1.2 Material and procedure
A fictitious sports bracelet brand named Hami was created as the experimental material. The descriptions of the brand and new product in Study 2a were similarly manipulated as in Study 1. The results of a pretest indicated that the experimental materials were suitable for the formal experiment (see Appendix).

In the formal experiment, participants viewed the scenario and responded to questions on purchase intentions (2 = 0.925). Subsequently, manipulation checks of the materials were conducted. It was followed by a section for measuring power distance belief with the items derived from Sharma (2010) (2 = 0.831). The final section recorded the participants’ personal information.

5.1.3 Results and discussion
5.1.3.1 Manipulation checks. The market positions of the horizontal extended product and its low-status parent brand were consistent \([M_{\text{low-status parent brand}} = 2.494, M_{\text{horizontal extended product}} = 2.452, F(1,172) = 0.135, p = 0.713]\), whereas the marketing position of the downward extended product was significantly lower than its high-status parent brand \([M_{\text{high-status parent brand}} = 6.233, M_{\text{downward extended product}} = 2.317, F(1,172) = 1,282.020, p < 0.001]\). Meanwhile, the market positions of the horizontal
and downward extended products were similar \[ F(1,172) = 1.119, p = 0.292 \], whereas that of the low-status (versus high-status) parent brand were significantly lower \[ F(1,172) = 1,169.495, p < 0.001 \]. The manipulation of the product type was successful.

5.1.3.2 Main effect. The product type significantly influenced purchase intentions, with consumers’ purchase intentions for the downward (versus horizontal) extended product being significantly lower \[ M_{\text{horizontal extended product}} = 5.774, M_{\text{downward extended product}} = 5.259, F(1,172) = 7.175, p = 0.008 \]. \( H1 \) is supported.

5.1.3.3 Moderating effect. The results of the regression analysis (Process Model 1, 5,000 samples) showed that power distance belief moderated the effect of product type on consumers’ purchase intentions (\( b = -0.5002, p < 0.001 \)). Specifically, consumers with low power distance belief exhibited similar levels of purchase intentions for the downward and horizontal extended products (\( b = 0.1722, \text{LLCI} = -0.3322, \text{ULCI} = 0.6765 \)), whereas consumers with high power distance belief exhibited lower purchase intentions for the downward (versus horizontal) extended product (\( b = -1.0807, \text{LLCI} = -1.5872, \text{ULCI} = -0.5741 \)) (see Figure 1a). \( H4 \) is supported.

5.1.3.4 Discussion. The main effect of product type from Study 1 was replicated in Study 2a. Study 2a also examined the moderating role of power distance belief. The findings suggest a critical boundary condition for product type to influence consumers’ purchase intentions. Specifically, a low power distance belief attenuated the negative effect of the downward line extension. Notably, Study 2a measured power distance belief as a chronic personality trait. Previous studies have also shown that power distance belief can be manipulated by a priming approach (He et al., 2023; Winterich and Zhang, 2014; Zhang et al., 2010). To enhance the external validity and the practical significance of the findings, Study 2b was conducted to explore the moderating role of power distance belief by priming it as a situational trait.

5.2 Study 2b
5.2.1 Participants and design
In Study 2b, 196 participants (19–58 years, 90 males, \( M_{\text{age}} = 31.91, SD = 8.36 \)) from Credamo were involved in a 2 (product type: horizontal extended versus downward extended) × 2 (power distance belief: low versus high) between-subjects design.

5.2.2 Material and procedure
A fictitious wristwatch brand named Spotter, a product picture, and relevant descriptions were created as the experimental materials. The product type was similarly manipulated as in

**Figure 1** Experimental results

![Experimental results](image)

Notes: (a) Moderating results of Study 2a; (b) moderating results of Study 2b; (c) moderating results of Study 2c; (d) moderated mediating results of Study 2c. ***p < 0.001; **p < 0.01

Source: Authors’ work
Study 1. A pretest validated that the experimental materials were suitable for the formal experiment (see Appendix).

At the beginning of the formal experiment, the power distance belief prime (Zhang et al., 2010), in which participants were asked to order the words associated with social hierarchy or social equality to make sentences, was used to manipulate the participants’ power distance belief. Three items were then used to measure participants’ power distance belief (e.g. For the time being, I mainly think that . . .). Afterwards, the participants perceived the brand and product information and answered the questions about purchase intentions ($\alpha = 0.931$) and perceived fit ($\alpha = 0.916$). Next, the manipulation checks of the materials were conducted. Finally, all participants provided basic personal information.

5.2.3 Results and discussion

5.2.3.1 Manipulation checks. The market positions of the horizontal extended product and its low-status parent brand were perceived to be resembling $M_{low-status\ parent\ brand} = 2.432$, $M_{horizontal\ extended\ product} = 2.411$, $F(1,194) < 0.001, p = 0.791$, whereas the marketing position of the downward extended product was perceived to be significantly lower than its high-status parent brand $M_{high-status\ parent\ brand} = 6.267$, $M_{downward\ extended\ product} = 2.287, F(1,194) = 2.677.815, p < 0.001$. Meanwhile, the market positions of the horizontal and downward extended products were indistinctive $F(1,194) = 1.151, p = 0.285$, whereas that of the low-status (versus high-status) parent brand was significantly lower $F(1,194) = 1.235.259, p < 0.001$. The results displayed that the manipulation of the product type was successful. Additionally, the group with high power distance belief ($M = 5.289$) reported a significantly higher level of power distance belief than the group with low power distance belief ($M = 1.641, F(1,194) = 318.041, p < 0.001$), implying a successful manipulation of power distance belief.

5.2.3.2 Moderating effect. The interaction effect between power distance belief and product type on consumers’ purchase intentions was significant $F(1,192) = 8.247, p = 0.005$. Simple effect analyzes indicated that consumers with low power distance belief did not differ in their purchase intentions for downward and horizontal extended products $M_{horizontal\ extended\ product} = 5.660, M_{downward\ extended\ product} = 5.577, F(1,192) = 0.939, p = 0.761$, while consumers with high power distance belief developed lower purchase intentions for downward (versus horizontal) extended products $M_{horizontal\ extended\ product} = 5.810, M_{downward\ extended\ product} = 4.571, F(1,192) = 17.653, p < 0.001$, supporting $H4$ (see Figure 1b).

5.2.3.3 Moderated mediating effect. A 95% bias-corrected bootstrapping analysis with 5,000 samples (Process Model 8) was used to test the moderated mediating effect. The interaction between power distance belief and product type predicted perceived fit ($b = 0.3621, p = 0.032$), and perceived fit predicted purchase intentions ($b = 0.6363, p < 0.001$). The conditional indirect effect of the interaction effect between power distance belief and product type on consumers’ purchase intentions through perceived fit was significant ($b = 0.4971, LLCI = 0.0446, ULCI = 1.0158$). Specifically, for consumers with high power distance belief, the indirect effect of perceived fit ($b = -1.3159, LLCI = -1.8318, ULCI = -0.8499$) was significant. For consumers with low power distance belief, the indirect effect of perceived fit ($b = -0.8189, LLCI = -1.1909, ULCI = -0.4997$) was also significant. The indirect effect was weaker for consumers with low (versus high) power distance belief. $H5$ is supported.

An additional bootstrapping analysis (Process Model 15) was conducted to test whether power distance belief moderates the relationship between perceived fit and purchase intentions. The results indicated that the interaction effect between power distance belief and perceived fit was not significant ($b = -0.1533, p = 0.2454$) and that the moderated mediation model was not supported ($b = 0.2556, LLCI = -0.2857, ULCI = 0.8370$).

5.2.3.4 Discussion. Study 2b provided extra evidence for the findings of Study 2a by priming power distance belief as a situational trait, as power distance belief moderated the effect of product type on consumers’ purchase intentions. It also confirmed that perceived fit mediated the interaction effect between power distance belief and product type on consumers’ purchase intentions. However, self-congruity was not measured and tested in Study 2b, leaving a question as to whether self-congruity could mediate the interaction effect. The findings of the above studies also raise the following question: Does the information concerning the low-status parent brand of horizontal extended products truly play a role? If the horizontal extended products only serve as a control condition, then the information concerning the parent brand might be redundant. To answer these questions, Study 2c was conducted by removing the parent brand information in the control condition and measuring two mediators simultaneously. A scale different from Study 2a was used in Study 2c to measure power distance belief to further enhance the validity of the findings.

5.3 Study 2c

5.3.1 Participants and design

In Study 2c, 257 participants (19–69 years, 86 males, $M_{age} = 31.98, SD = 6.85$) from Credamo were randomly assigned to conditions in a single-factor between-subjects design (product type: horizontal extended versus downward extended).

5.3.2 Material and procedure

Similar experimental materials to Study 2a were adopted, except that, for the horizontal extended product, the specific information concerning the low-status parent brand was removed. In the formal experiment, the participants were asked to read the description, view the image of the sports bracelet, and then respond to items measuring purchase intentions ($\alpha = 0.872$), perceived fit ($\alpha = 0.893$) and self-congruity ($\alpha = 0.896$). Subsequently, the manipulation checks of the materials were conducted before the power distance belief was measured with eight items borrowed from Zhang et al. (2010) ($\alpha = 0.792$). The final section recorded the participants’ personal information.

5.3.3 Results and discussion

5.3.3.1 Manipulation checks. The market position of the downward extended product was significantly lower than its high-status parent brand $M_{high-status\ parent\ brand} = 5.827$, $M_{downward\ extended\ product} = 2.728, F(1,255) = 423.923, p < 0.001$. Meanwhile, the market positions of the horizontal
and downward extended products were indistinctive \([M_{\text{horizontal extended product}} = 2.938, M_{\text{downward extended product}} = 2.728, F(1, 255) = 1.384, p = 0.240]\). As a result, the manipulation of the product type was successful.

5.3.3.2 Main effect. The ANOVA demonstrated that consumers developed lower purchase intentions for the downward (versus horizontal) extended product \([M_{\text{horizontal extended product}} = 5.903, M_{\text{downward extended product}} = 5.559, F(1, 255) = 6.815, p = 0.010]\). \(H1\) is supported again.

5.3.3.3 Moderating effect. The results of the bootstrapping analysis (Process Model 1, 5,000 samples) showed that power distance belief moderated the effect of product type on consumers’ purchase intentions \((b = -0.5555, p < 0.001)\). Specifically, consumers with low power distance belief did not differ in their purchase intentions for the downward and horizontal extended products \((b = 0.1522, LLCI = -0.1961, ULCI = 0.5006)\), whereas consumers with high power distance belief reported lower purchase intentions for the downward (versus horizontal) extended products \((b = -0.8381, LLCI = -1.1866, ULCI = -0.4897)\) (see Figure 1c). \(H4\) is supported again.

5.3.3.4 Moderated mediating effects. A 95% bias-corrected bootstrapping analysis with 5,000 samples (Process Model 8) was conducted to test the moderated mediating effects of perceived fit and self-congruity. Perceived fit and self-congruity were entered into the model simultaneously. The interaction between power distance belief and product type predicted perceived fit \((b = -0.4599, p = 0.002)\) and self-congruity \((b = -0.7011, p < 0.001)\), while perceived fit \((b = 0.2951, p < 0.001)\) and self-congruity \((b = 0.5082, p < 0.001)\) further predicted purchase intentions. The conditional indirect effects of the interaction effect between power distance belief and product type on consumers’ purchase intentions through perceived fit \((b = -0.1357, LLCI = -0.2599, ULCI = -0.0163)\) and self-congruity \((b = -0.3563, LLCI = -0.5473, ULCI = -0.1414)\) were significant. Specifically, for consumers with high power distance belief, the indirect effects of perceived fit \((b = -0.3300, LLCI = -0.5245, ULCI = -0.1441)\) and self-congruity \((b = -0.5198, LLCI = -0.7734, ULCI = -0.2458)\) were significant. For consumers with low power distance belief, the indirect effects of perceived fit \((b = -0.0880, LLCI = -0.2158, ULCI = 0.0160)\) and self-congruity \((b = 0.1154, LLCI = -0.0992, ULCI = 0.3227)\) were not significant. \(H5\) and \(H6\) are supported (see Figure 1d).

5.3.3.5 Discussion. The results of Study 2c were mostly consistent with other studies, even though the parent brand information of the horizontal extended product was removed. Specifically, it confirmed the main effect of product type and the moderating effect of power distance belief. It also showed that perceived fit and self-congruity jointly mediated the interaction effect between power distance belief and product type on consumers’ purchase intentions.

6. General discussion

This study examines the effect of product type (i.e. horizontal extended and downward extended products) on consumers’ purchase intentions, the mediating roles of perceived fit and self-congruity and the moderating role of power distance belief. First, a series of studies provided converging evidence that consumers’ purchase intentions for downward (versus horizontal) extended products are lower. Second, Study 1 demonstrated that perceived fit and self-congruity mediate the relationship between product type and consumers’ purchase intentions. Furthermore, Studies 2a, 2b and 2c identified power distance belief as a boundary condition for the main effect of product type, as low power distance belief attenuated the negative effect of downward line extension. Finally, Study 2c confirmed that perceived fit and self-congruity mediate the interaction effect between power distance belief and product type on consumers’ purchase intentions.

6.1 Theoretical and practical contributions

Several theoretical contributions are made in this study. First, this study advances the literature on line extension. Previous studies have mainly focused on the extension of a single brand by comparing upward and downward line extensions (Boisvert and Ashill, 2022; Hao et al., 2020; Shirai, 2022) and between horizontal and downward line extensions of the same brand (Boisvert and Ashill, 2018, 2022; Childs et al., 2018; Zeng et al., 2019), attempting to identify an effective extension strategy for the brand. However, they have largely ignored the fact that a downward extended product launched by a high-status brand is likely to be challenged by a horizontal extended product launched by a relatively low-status brand with a similar price. There is a lack of research on how consumers respond to these two types of products. For this reason, unlike previous studies, this study makes a preliminary attempt to narrow this gap in the literature by investigating consumers’ purchase intentions for these two types of products (i.e. horizontal and downward extended products) originating from different brands, which enhances the understanding of consumers’ reactions to downward line extension. It is found that consumers respond negatively to downward (versus horizontal) extended products, which could explain the high failure rate of downward line extension in practice.

Second, this study uncovers the psychological mechanisms underlying the impact of product type (horizontal extended versus downward extended) on consumers’ purchase intentions. Previous studies have indicated that perceived fit is much more relevant to brand extension, which involves using a parent brand name for a new product in a new product category (Kim and Park, 2019; Su et al., 2021). In contrast, the perceived fit has been understudied in line extension research (Pontes, 2018). Building on schema theory, this study introduces perceived fit as a mediator in the response to line extension, demonstrating that the reduced perceptions of fit for downward (versus horizontal) extended products make consumers less willing to purchase the products. Hence, this study provides a significant expansion of schema theory. On the other hand, although self-congruity is widely investigated in brand-related research (Aw et al., 2021; Baker et al., 2020; Boisvert et al., 2023; Li et al., 2022), its role in line extension has not been clearly characterized. This study is among the first to introduce self-congruity into line extension research and confirms its mediating role. By illuminating the joint mediating effects of perceived fit and self-congruity, this study enriches the literature on line extension and helps researchers deepen their understanding of how downward line extension affects consumer responses.

Third and most importantly, this study provides a unique contribution to the literature by identifying a boundary
condition for product type that affects consumers’ purchase intentions. Previous studies have attempted to delineate the determinants of the effectiveness of downward line extension, including product categories (i.e. cars and fashion) (Dall’Olmo Riley et al., 2013), the ownership of the original product (Kirmani et al., 1999), gender (Boisvert and Ashill, 2022) and the distance between downward extended products and the core brand (Kim et al., 2001). In contrast, few studies have explored how to diminish the negative effects of downward line extension from the perspective of personality traits. This study fills the gap by demonstrating that power distance belief plays a moderating role in the impact of product type on consumers’ purchase intentions. Specifically, low power distance belief attenuates the negative effects of downward line extension, suggesting that power distance belief can be a valuable determinant of downward line extension effectiveness. To the best of the authors’ knowledge, this study serves as an initial attempt to introduce power distance belief into the research of downward line extension, which broadens the research scope of line extension and verifies the value of power distance belief in the research of downward line extension.

Marketing practitioners can benefit from the study’s managerial implications. The findings of this study indicate that although downward line extension is becoming increasingly common during economically difficult times, marketers should exercise extreme caution when implementing it. This is because downward extended products run the risk of failing when compared to horizontal extended products in the same market segment. To minimize negative consequences, marketers can target downward extended products primarily to consumers with low power distance belief because they respond similarly to downward and horizontal extended products, whereas consumers with high power distance belief are less likely to purchase downward (versus horizontal) extended products. Beyond that, marketers can actively use the priming approach to evoke a low power distance belief. For instance, potential consumers can be presented with scenarios or slogans that emphasize the importance of social equality before introducing downward extended products. Finally, marketers should strive to enhance consumers’ perception of fit and self-congruity when executing the strategy of downward line extension, as perceived fit and self-congruity exert positive influences on consumers’ purchase intentions.

6.2 Limitations and future directions
This study has some limitations, which may provide opportunities for future research. First, the participants were placed in hypothetical scenarios with fictitious brands and products to prevent the potential effects of their prior experience and knowledge of real brands and products. Nevertheless, consumers may react in a more complex manner when they are confronted with the proposed scenario in reality, as they may consider various other factors like brand familiarity and reputation.

Second, the written scenarios create an artificially salient contrast between the high-status brand and downward extended products. In reality, companies are likely to enhance consumer adoption by telling a story that establishes a connection between their brands and the new product. To address this issue, more realistic settings are recommended to be included in future studies.

Third, this study did not consider other personality traits like regulatory focus. It is suggested that regulatory focus (i.e. promotion focus and prevention focus) moderates the impact of similar and dissimilar extensions of a brand on the extension evaluation (Yeo and Park, 2006). Regulatory focus may also influence the relationship between product type and consumers’ responses. Future studies could take personality traits other than power distance belief into consideration and investigate how they moderate the influence of product type on consumers’ purchase intentions.

Finally, this study focused on comparing consumers’ responses to horizontal extended and downward extended products. As a result, this study cannot directly delineate how consumers choose between these two options when they are presented simultaneously. Future work can extend this line of research by conducting discrete choice experiments to test consumers’ preferences between these two types of products.

References


Appendix. Pretest of Study 1

A total of 110 participants were recruited via Credamo and randomly allocated to different conditions. Based on the product description and image displayed on the questionnaire, participants in each condition were asked to randomly allocate to different conditions. Based on the product description and image displayed on the questionnaire, participants in each condition were asked to randomly allocate to different conditions. Based on the product description and image displayed on the questionnaire, participants in each condition were asked to randomly allocate to different conditions. Based on the product description and image displayed on the questionnaire, participants in each condition were asked to randomly allocate to different conditions. Based on the product description and image displayed on the questionnaire, participants in each condition were asked to randomly allocate to different conditions. Based on the product description and image displayed on the questionnaire, participants in each condition were asked to randomly allocate to different conditions. Based on the product description and image displayed on the questionnaire, participants in each condition were asked to randomly allocate to different conditions. Based on the product description and image displayed on the questionnaire, participants in each condition were asked to randomly allocate to different conditions. Based on the product description and image displayed on the questionnaire, participants in each condition were asked to randomly allocate to different conditions. Based on the product description and image displayed on the questionnaire, participants in each condition were asked to randomly allocate to different conditions. Based on the product description and image displayed on the questionnaire, participants in each condition were asked to randomly allocate to different conditions. Based on the product description and image displayed on the questionnaire, participants in each condition were asked to randomly allocate to different conditions. Based on the product description and image displayed on the questionnaire, participants in each condition were asked to randomly allocate to different conditions. Based on the product description and image displayed on the questionnaire, participants in each condition were asked to randomly allocate to different conditions. Based on the product description and image displayed on the questionnaire, participants in each condition were asked to randomly allocate to different conditions. Based on the product description and image displayed on the questionnaire, participants in each condition were asked to randomly allocate to different conditions. Based on the product description and image displayed on the questionnaire, participants in each condition were asked to randomly allocate to different conditions. Based on the product description and image displayed on the questionnaire, participants in each condition were asked to randomly allocate to different conditions. Based on the product description and image displayed on the questionnaire, participants in each condition were asked to randomly allocate to different conditions. Based on the product description and image displayed on the questionnaire, participants in each condition were asked to randomly allocate to different conditions. Based on the product description and image displayed on the questionnaire, participants in each condition were asked to randomly allocate to different conditions. Based on the product description and image displayed on the questionnaire, participants in each condition were asked to randomly allocate to different conditions. Based on the product description and image displayed on the questionnaire, participants in each condition were asked to randomly allocate to different conditions. Based on the product description and image displayed on the questionnaire, participants in each condition were asked to randomly allocate to different conditions.

Pretest of Study 2a

A pretest was executed with 110 participants. The results suggested that the market positions of the regular extended product and its low-status parent brand were consistent [M_{low-status parent brand} = 2.500, M_{regular extended product} = 2.364, F(1,108) = 0.608, p = 0.437]. However, the marketing position of the downward extended product was significantly lower than its high-status parent brand [M_{high-status parent brand} = 5.791, M_{downward extended product} = 2.382, F(1,108) = 379.782, p < 0.001], displaying a successful manipulation of the product type. Meanwhile, the market positions of the regular and downward extended products were similar [F(1,108) = 0.006, p = 0.937], whereas that of the low-status (versus high-status) parent brand were significantly lower [F(1,108) = 291.497, p < 0.001].

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