

The Effect of Plus-Sized Model Image Presentation Order on Plus-Sized Consumers' Self-Referencing and Purchase Intentions

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Introduction

Over a decade ago, Abercrombie & Fitch's former CEO made remarks regarding the exclusivity of their clothing sizes, commenting that only thin individuals could be considered "cool kids," which sparked widespread boycotts against the brand (Carter, 2013). To this day, the brand has struggled to fully restore its reputation and continues to be associated with discrimination. The era when the plus-sized collection was deemed unnecessary for apparel retailers is long gone, given the increasing diversity and inclusive perceptions of body size and standards of beauty (Anderson et al., 2022). With the rise in the prominence of plus-size models featured by online retailers, it is worth exploring the effective presentation of different model sizes without eliciting negative responses. Thus, this study examines the effect of the image presentation order of plus-sized models (PM; who wear sizes over XL) when accompanied by images of either thin-sized models (TM; XS-S size) or regular-sized models (RM; M-L size) on self-referencing perceptions and purchase intentions among plus-sized consumers.

Theoretical Framework

The belief-adjustment model (Hogarth & Einhorn, 1992) and the selective accessibility model (Mussweiler & Strack, 1999) serve as the foundation for explaining the underlying mechanisms. According to the *belief-adjustment model*, the presentation order of the same stimuli can influence individuals' evaluations, potentially leading to biased judgments. The order of information presentation typically reveals whether individuals assign greater weight to information presented first (i.e., primacy effect) or last (i.e., recency effect). In this context, the perceptions of plus-sized consumers may vary depending on whether the PM image is presented first or last. Further, the *selective accessibility model* suggests that information congruent with individuals' beliefs is more readily accessible in memory and is given more weight in judgment, resulting in an assimilation effect. Conversely, the contrast effect occurs when the information is irrelevant or unreasonable to individuals' beliefs. Thus, in this study, the contrast effect would likely occur when plus-sized consumers are exposed to TM images, given the significant dissimilarities in body size, while an assimilation effect may occur when they view RM images, as the discrepancy in body size is less pronounced.

Hypothesis Development

While the inclusion of PMs has been shown to lead positive perceptions among plus-sized consumers (Joo & Wu, 2021), the placement of the PM image and types of accompanying model images can further impact their perceptions. When the PM image is presented first before TM images, plus-sized consumers would have a stronger recollection of the first image due to greater

self-referencing from the first image. Subsequently, the following TM images may be disregarded due to the contrast effect, according to the selective accessibility model. In the similar vein, previous research has shown that consumers with a high interest in a stimulus are more inclined to process initial information while reducing their processing of subsequent information (Brunel & Nelson, 2003). Conversely, when series of TM images are presented first, plus-sized consumers may try to evaluate whether the clothing would fit them, given the significant discrepancy in body shapes (i.e., contrast effect). This would reduce information processing fluency and increase cognitive load, resulting in diminishing individuals' cognitive capacity to process subsequent information, including PM image. H1 is formulated as follows:

H1. Plus-sized consumers have higher self-referencing and purchase intentions when the PM image is presented before than after TM images, indicating a primacy effect.

RM images accompanying the PM image are expected to be processed differently from TM images due to the assimilation effect, wherein the RM serves as relevant and applicable information to evaluate clothing fits among plus-sized consumers. When RM images are presented before the PM image, plus-sized consumers are expected to retain sufficient cognitive capacity to process the PM image after processing the RM images, due to heightened information processing fluency. Also, when the PM image is presented before RM images, plus-sized consumers are likely to take into account the RM images instead of ignoring them. This notion is further supported by the dual-coding theory (Paivio, 1991), which suggests that unlike verbal information encoded piece by piece, pictorial information is perceived as a single integrated piece. As both RM and PM images are relevant to plus-sized consumers, despite being presented sequentially, plus-sized consumers may perceive these images as integrated information rather than sequential, thereby nullifying the ordering effect. Thus, we proposed H2 as follows:

H2. Plus-sized consumers' perceptions of self-referencing and purchase intentions do not differ whether a PM image is presented before or after RM images (H2).

Method

Through the stimulus development process, involving 18 images featuring six jean styles across three model sizes (TM, RM, and PM), we selected a style of jeans in three different model sizes. Utilizing the developed stimuli, we conducted a between-subject experimental design with 2 (order of images: PM image presented first vs. last) \times 2 (other type of model image: TM vs. RM), resulting in four conditions. Each stimulus consisted of a series of five vertically arranged images, with either the first or last image featuring a PM wearing jeans, and the remaining four images (front, back, side, and detail views) featuring jeans worn by either TM or RM. A total of 206 participants, all female residents of the United States who wore plus-sized clothing (XL to 5XL), were recruited. After reviewing the five images and product information on a mock online shopping platform, they were asked to answer questions about self-referencing (Martin et al., 2004) and purchase intentions (Dodds et al., 1991).

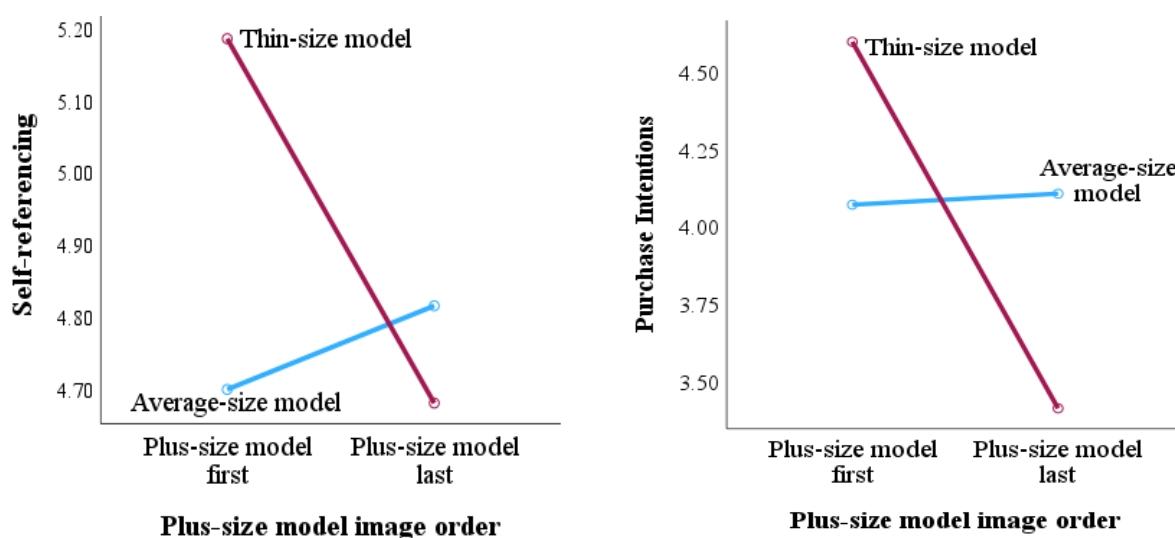
Results

We first confirmed the discriminant and convergent validities of constructs as well as the successful manipulation check. Then, the results of the two-way ANOVA revealed significant main effects of the image order on self-referencing ($F_{(1, 205)}=6.68, p<.01$) and purchase intentions

($F_{(1, 205)}=4.43, p<.05$), while no significant main effects of the type of model image on self-referencing and purchase intentions were observed. The interaction effects between the order of image and type of model image on self-referencing ($F_{(1, 205)}=4.55, p<.05$) and purchase intentions ($F_{(1, 205)}=5.00, p<.05$) were significant. Further, the planned contrast results showed that plus-sized participants exhibited greater self-referencing ($t=3.21, p<.01, M_{PMFirst}=5.40, M_{PMLast}=4.34$) and higher purchase intentions ($t=2.95, p<.01, M_{PMFirst}=4.60, M_{PMLast}=3.42$) when exposed to the PM image shown before than after four TM images (i.e., primacy effect), accepting H1. In contrast, no significant differences were found in the image order when comparing the PM image shown before and after four RM images, accepting H2. The interaction effect is illustrated in Figure 1 to facilitate an understanding of the results.

Figure 1

Effect of Plus-Size Model Image Presentation Order on Self-Referencing and Purchase Intentions Across Accompanying Model Types



Conclusion

The findings revealed that plus-sized consumers referred themselves more to the product and exhibited higher purchase intentions when a PM image was presented before than after a TM images. Previous research has focused on consumers' perceptions of PM images in isolation, without considering the presence of other sized-model images such as thin and regular. Additionally, there has been limited exploration of the impact of image presentation order in this context. Thus, this study advances research on to both the literature on presentation order and body image by expanding our understanding. This research also offers valuable practical insights for retailers offering plus-sized clothing, advising them on how to optimize the arrangement of product images for maximal profitability. As setting image order on websites involves low costs, these findings offer a cost-effective strategy for easy adoption by online retailers.

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