The Upside of Randomization: the Influence of Uncategorized Product Display on Consumers’ Shopping Evaluation

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Via five experiments, this research shows that relative to a categorized presentation, a randomized product presentation is likely to result in more favorable product evaluations and shopping. We identified feelings of arousal as the mediator of the positive randomization effect and the conditions under which this effect would occur.

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EXTENDED ABSTRACT

Although organizing products by category is a common marketing practice and has been shown to increase consumer satisfaction (Mogilner, Rudnick, and Iyengar 2008), presenting products in a randomly arranged set (e.g. flea market and store sales) may also lead to pleasant shopping experiences. The present research demonstrates the positive influence of random product presentation on shopping evaluations.

In this research, we define a categorized set as a group of products that are sorted according to product type. A randomized set is a set of products displayed randomly with no a priori categorization. Accordingly to research on environmental psychology, environmental complexity and unpredictability signals greater amount of information to be processed, which induces feelings of arousal (Berlyne 1971; Mehrabian and Russell 1974). Hence, we propose that consumers would experience greater arousal when browsing a randomized product set than a categorized set. In addition, research has shown that arousal can serve as a magnifier of emotions and evaluations (Reisenzein 1983; Russell and Mehrabian 1976). Because shopping is generally considered a positive activity (Bloch andRichins 1983; Holbrook and Hirschman 1982), we propose that greater arousal elicited by a randomized set will intensify the pleasantness associated with the shopping experience and subsequently result in greater choice satisfaction and more enjoyable shopping experiences. We refer to this effect as the positive product randomization effect.

This randomization effect, however, hinges on two conditions. First, a complex environment could elicit arousal because it signals increased amount of information that one needs to process (Berlyne 1960). Therefore, when individuals have a motivation to screen off unnecessary information and only process important or relevant information, they are less likely to feel aroused even in a complex environment (Mehrabian 1977). We thus propose that when consumers have a priori shopping goal, motivating them to search and selectively focus on a subset of products rather than exploring the choice set, they are less likely to be aroused by a randomized set. In addition, since categorization facilitates product searching and enhance perceived variety when consumers engage in goal-oriented shopping (Hoch et al. 1999; Mogilner et al. 2008), we should observe a positive categorization effect in this condition. The second prerequisite condition is that shopping should be considered as a pleasant experience. If shopping is considered unpleasant, such as when the product options are unattractive, the polarizing effect of arousal (Reisenzein 1983) is expected to result in more negative affective reactions, and subsequently lead to more negative shopping evaluations.

Experiment 1 examined the randomization effect and obtained evidence for arousal being the mediator. Participants firstly browse 64 stationery products arranged in four columns and 16 rows. The products were either sorted into 16 sub-categories or displayed randomly. After browsing, participants rated their feelings of arousal and pleasure. After that, participants saw the same product set again and indicated the products they would like to buy. Then, they rated choice satisfaction and shopping experience. Independent-samples t-tests showed that participants reported greater choice satisfaction when the set was randomized than categorized (6.81 vs. 5.70; t(69) = 2.61, p < .05). Similar results were detected on shopping experience (6.53 vs. 5.66; t(69) = 2.09, p < .05), arousal (5.50 vs. 4.86; t(69) = 2.06, p < .05) and pleasure (6.61 vs. 5.86; t(69) = 2.60, p < .05). Mediation analyses revealed that arousal mediates these randomization effects.

Using 54 different chocolates and 64 stationery products, respectively, Experiment 2 and 3 manipulated consumers’ ideal point availability and task-oriented shopping motivation to demonstrate that when consumers had target product(s) to purchase, relative to a categorized set, a randomized set reversely decreased choice satisfaction. Experiment 3 further demonstrated that arousal and perceived variety mediated the randomization and categorization effect, respectively.

Experiment 4 then tested that the valence of the stimuli moderated the valence of the impacts of elicited arousal on shopping evaluations. An animal donation scenario was employed and the stimuli valence was manipulated the by using either 40 good-looking endangered animals or 40 creepy-looking ones. ANOVA analysis of stimuli valence and set organization on arousal feeling revealed the main effect of organization (M_randomized = 6.22 vs. M_categorized = 5.65; F(1, 139) = 7.43, p < .01), which did not depend on stimuli valence. However, the valence of the influences of organization on choice satisfaction depends on the stimuli’s valence (F(1, 139) = 7.77, p < .01). Specifically, for attractive animals, participants reported greater satisfaction when the set was randomized than when it was categorized (7.31 vs. 6.45; F(1, 139) = 4.90, p < .05); the effect was reversed for aversive animals (4.16 vs. 4.84; F(1, 139) = 2.99, p = .09).

Lastly, based on research findings that visual information is more information-rich and verbal information is less complex (Townsend & Kahn 2014), we propose that the randomization effect would be less likely to occur when the products were only presented verbally. Experiment 5 tested this proposition by employing 48 magazines which are presented either verbally in text or visually in pictures. The results showed that the randomized set elicited arousal, and thus enhance the pleasurable feelings, choice and experience evaluations only in the visual present condition rather than in the verbal condition. Further, in the visual present condition, arousal feeling mediates the positive influences of randomization on choice evaluation and shopping experience.

With five experiments, this research demonstrates the influence of product randomization on arousal feelings and its positive influence on shopping evaluations. Our findings enrich the extant knowledge about the impacts of product display method (Diehl et al. 2015; Kahn and Wansink 2004; Mogilner et al. 2008) on shopping evaluations. Our findings also add to the growing body of literature examining the influence of shopping environment on consumers’ evaluative judgments (Kaltcheva and Weitz 2006; Milliman 1986; Muro and Murray 2012; Spangenberg et al. 1996). The findings of this study may have useful marketing implications for store arrangements.

REFERENCES


Russell and Mehrabian 1976

Diehl et al. 2015

Kahn and Wansink 2004

Mogilner et al. 2008

Kaltcheva and Weitz 2006

Milliman 1986

Muro and Murray 2012

Spangenberg et al. 1996

REFERENCES


