Product Bundles and the Compositional Nature of Contextual Information

Dan Rice, University of Florida, USA
Alan Cooke, University of Florida, USA

How does context affect consumers’ reaction to product bundles? This research demonstrates that consumers are sensitive to distributional and compositional information in the contextual set. We show that the evaluations of particular product bundles depend upon how other products are combined into bundles, even when the set of contextual products is held constant. These context effects change how the target bundles are perceived, producing systematic reversals in bundle preference. We argue that these effects are due to effortful comparisons between bundles and find that increasing the difficulty of bundle comparisons moderates the process by which consumers use bundle context.

[to cite]:

[url]:
http://www.acrwebsite.org/volumes/14466/volumes/v36/NA-36

[copyright notice]:
This work is copyrighted by The Association for Consumer Research. For permission to copy or use this work in whole or in part, please contact the Copyright Clearance Center at http://www.copyright.com/.
EXTENDED ABSTRACT

With all of the attention that examinations of bundle evaluations have garnered in the literature, it is surprising that no research has investigated how consumers process contextual information when the context, target, or both are composed of bundles. The evaluation of individual product offers has been shown to be sensitive to dominance (Huber, Payne and Puto 1982), attribute tradeoffs (Simonson and Tversky 1992), tradeoff extremity (Simonson and Tversky 1992), attribute range and spacing (Cooke and Mellers 1998; Mellers and Cooke 1994; Parducci 1965), timing of product presentation (Wedell, Parducci and Geiselman 1987), and the extremity of the contextual products (Herr 1989), to name a few. Despite these results, little research has investigated how contextual information is processed when the target or contextual offers consist of product bundles. Here, contextual information is available not only in the distributions of each product category, but also in the joint distributions of attributes across different bundles containing these products. This compositional information may also serve as a context relative to which bundles are evaluated.

The primary goal of this research is to demonstrate that consumers are sensitive to how single contextual products are combined into bundles when evaluating target stimuli. To avoid confusion, we refer to this previously unexplored compositional contextual information as “bundle context,” and the context created by single products as “single product context.” After demonstrating the existence of bundle context effects, we further examine the process by which consumers account for the bundle context and explore moderators of the effects. We propose that the influence of bundle context is due to effortful comparisons between the bundle and the surrounding context, and the relative difficulty of these comparisons moderates the effects of the context. Three experiments provide evidence to support our hypotheses.

Our first experiment used a constant set of eight individual products that were pretested for attractiveness. The four moderately attractive products were combined into high and low attractiveness target bundles. Bundle context was manipulated by differentially combining the remaining four contextual products in different conditions. In the wide bundle contexts, the two most attractive products were bundled together in one contextual bundle and the two least attractive products were bundled together in the other. This created a wide range of overall attractiveness at the bundle level. In the narrow bundle context, the most attractive contextual item was paired with the least attractive contextual item and the second most attractive item with the second least attractive, forming a relatively narrow range of overall bundle attractiveness with the same individual products.

The results of experiment 1 show that bundle context influences the way consumers perceive contextual stimuli even when single product context is held constant. Target bundles appeared more similar in the wide context, where contextual bundles had widely disparate overall evaluations, than in the narrow context, where contextual bundles were more similar in overall evaluation. If consumers were only sensitive to single product context or were insensitive to context effects, the evaluations of the target bundles should have been constant across all conditions.

The results also revealed that bundle attractiveness was significantly less than the most attractive product it contained in all but the wide context, high context bundle comparison. This might be due to a ceiling effect of the two best products combined together in one bundle. This pattern of results is inconsistent with an additive model, even one allowing for extreme subadditivity. However, it is consistent with a number of alternative combination processes including both averaging and anchoring and adjustment processes.

A second experiment investigated whether the effects could be attributed to response language effects in the judgment process. The results of experiment 2 provide evidence that bundle choice reversals are possible and consumers are sensitive to the aggregate levels of attributes within the bundles of the contextual set even when the individual products in the set are held constant. From a theoretical standpoint, the choice reversal between target bundles is important because it shows that bundle context effects are a representational phenomenon that cannot be explained away by response language effects or single product context. That is, we obtain choice reversals between target bundles in a constant product set where the attribute levels only change at the bundle level. From a managerial perspective, the findings are important because they show that it is possible to create choice reversals between bundles simply by rearranging the products surrounding those bundles without adding new products to the set.

The third experiment investigates the process by which consumers account for the extra compositional information of how the individual products are paired in bundles (i.e. the bundle context). The results of experiment 3 indicate that bundle context effects are due to effortful contextual comparisons between bundles in the set. Participants found the bundle context information useful and tried to extract the information, but they were influenced more by the more attractive product in the bundle when under load.

Recognition analyses provide evidence that the attractiveness of the product influences recognition of the product. The analyses also show that the effect of attractiveness on recognition is greater under load. We interpret these results as an indication that the more attractive products were processed more deeply, creating better memory for those products ( Craik and Lockhart 1972). This is consistent with consumers anchoring on the more attractive product and adjusting for the less attractive products in bundle evaluations (Yadav 1994).

REFERENCES


Hsee, Christopher K. (1998), “Less is better: When low-value options are valued more highly than high-value options,” Journal of Behavioral Decision Making, 11 (June), 107-121.


