Because It Is Green or Beautiful? Consumer's Perceived Value of a Unique Type of Sustainable Packaging, Store Evaluation, and Store Patronage Intentions

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Introduction. The concepts of sustainability and environmental resilience are increasingly considered in the retail context. One effort for pursuing sustainability in the retail sector is the adoption of sustainable packaging. Sustainable packaging is packaging that promotes sustainable and ecological efficiencies (Magnier & Schoormans, 2015). Notably, some fashion and beauty brands develop and offer unique, innovative types of sustainable packaging. For example, LUSH, a U.K.-based cosmetic brand, developed “knot-wrap” packaging for their stores. “Knop-wrap” is made of organic cottons, has a variety of designs with vivid colors, and can be re-used for other purposes (e.g., scarves). A “seaweed-based” packaging, that is 100% biodegradable and edible, is another example of a unique type of sustainable packaging for beauty products. According to Owens (2019), sustainable packaging design has become a ‘selling point’ for brands that drives customers to buy.

Literature Review and Theoretical Framework. Researchers have maintained that sustainable packaging has desirable effects on consumer behavior (Magnier & Crié, 2015). According to Steenis (2019), the design of sustainable packaging positively influences consumer's perception, evaluation, and choice of packaged products. Other aspects of sustainable packaging such as functionality, aesthetic, cost, convenience/ease of use, and environment are also important to consumer's preference for sustainable packaging (Nordin & Selke, 2010; Steenis, 2019). Further, consumer's preference for sustainable packaging leads to their holding favorable attitudes and behavioral intentions. In a café setting, researchers found that the store's eco-friendly practices positively influenced customer's perceptions, attachment, attitude, and loyalty to the store (Jang et al., 2015; Jeong et al., 2014).

Despite fashion brands' increasing adoption of a unique type of sustainable packaging, there is a lack of research examining its impact on consumer behaviors. The purpose of this study was to investigate the perceived value of a unique type of sustainable packaging (i.e., green, aesthetic, functional, emotional, social, self-expression) and its impact on consumer's packaging evaluation, store evaluation, and store patronage intentions (e.g., purchase intention) in the context of a fashion brand store. We also tested whether consumer innovativeness and environmental concern moderated the effect of packaging evaluation on store evaluation.

Mehrabian and Russell's (1974) Stimulus-Organism-Response (S-O-R) model framed this study. The S-O-R model provides useful foundation to investigate the impact of a unique type of sustainable packaging (Stimulus) on perceived value of the packaging, packaging evaluation, and store evaluation (Organism), and store patronage intentions (Response). Specific hypotheses

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tested were as follows: [H1] Perceived value of sustainable packaging (H1a Green; H1b Aesthetic; H1c Functional; H1d Emotional; H1e Social; H1f Self-expression) influences packaging evaluation. [H2] Packaging evaluation influences store evaluation. [H3] Store evaluation influences store patronage intentions. [H4] Consumer innovativeness and [H5] environmental concern moderates the effect of packaging evaluation on store evaluation.

Method and Procedures. A convenience sample ($n=205$) was drawn from undergraduates enrolled at a university in the Eastern United States. After IRB approval participants (Ps) were directed to an online questionnaire. In the first part of the questionnaire, Ps were given pictures and descriptions of unique types of sustainable packaging (e.g., “Knot-wrap”). Then, Ps were asked to respond to established variable measures using 7-point scales: Perceived value of sustainable packaging (Green: “This packaging is environmentally friendly;” Aesthetic: “The design of this packaging makes it appealing to me;” Functional: “I think this packaging would perform well;” Emotional: “This packaging is one that I would enjoy to use;” Social: “The use of this packaging would make a good impression on other people;” Self-expression: “This packaging would help me express myself.”), packaging evaluation (“I have a favorable opinion about this packaging.”), store evaluation (“I would like the store that offers this packaging.”), store patronage intentions (“I would visit the store that offers this packaging.”), consumer innovativeness (“I like to go to places where I will be exposed to new things.”), and environmental concern (“I try to buy products that are made from recycled materials.”). The last section contained demographic questions. Structural equation modeling was used to test hypothesized relationships between variables.

Participant characteristics. Ps were women (76.2%), Caucasian (39.7%), and in their junior year (36.5%). They ranged in age from 18 to 29 years ($m=20.9$). Ps (69.8%) indicated that they visited a store that offers a packaging/container 1-4 times a week. Ps (87.3%) responded that they engaged in behaviors to protect the environment in their daily life (e.g., recycling).

Results. Confirmatory factor analysis showed that the measurements had acceptable construct validity, convergent validity, and discriminant validity. All item loadings were higher than 0.50 ($p<.001$) supporting unidimensionality of each construct. Cronbach’s alpha coefficients were higher than 0.70, indicating reliabilities were acceptable for all measures. The structural model exhibited a good fit with the data ($\chi^2/df=1.42$, CFI=.96, NNFI=.96, IFI=.96, RMSEA=.051). Among the six types of perceived value of sustainable packaging, self-expression value (H1f, $\beta=.45$, $t=3.62$, $p<.001$) had the strongest positive effect on packaging evaluation, followed by emotional (H1d, $\beta=.40$, $t=3.61$, $p<.001$), aesthetic (H1b, $\beta=.38$, $t=3.37$, $p<.001$), functional (H1c, $\beta=.36$, $t=3.27$, $p<.001$), and green value (H1a, $\beta=.18$, $t=1.87$, $p<.05$). Social value had no significant impact. Packaging evaluation had a positive and significant impact on store evaluation ($\beta=.81$, $t=4.37$, $p<.001$), supporting H2. Store evaluation positively influenced store patronage intentions ($\beta=.71$, $t=4.56$, $p<.001$), supporting H3. The effect of packaging evaluation on store evaluation was not significantly different between the high vs. low

innovativeness groups and between the high vs. low environmental concern groups, rejecting H4 and H5.

Discussion and Implications. The non-sustainability-related values of sustainable packaging (e.g., self-expression, emotional, aesthetic, functional) were key factors generating positive packaging evaluation, store evaluation, and store patronage intentions. Unlike general types of sustainable packaging typically emphasized a green value only (e.g., compostable paper coffee cups), all dimensions of values should be comprehensively considered for the sustainable packaging design for “fashion” products. Future studies can compare the effectiveness of general (e.g., regular containers) vs. unique types of sustainable packaging (e.g., “knot-wrap”) within different retail settings (e.g., grocery vs. apparel).

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