Matte Packaging and its Effect on Perceived Naturalness of a Product

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A package's surface is its exterior boundary (Merriam-Webster Online, 2017) and hence one of the first features consumers come into contact with. One major trend in the field of packaging is the use of matte, i.e. dull or lusterless, as opposed to glossy surfaces. We aim to shed light on why this trend may arise at a time at which natural products and ingredients seem to experience a renaissance (Bezawada & Pauwels, 2013).

The theoretical lens we apply is the lens of packaging as an external cue for the product itself (Richardson, Dick, & Jain, 1994). Especially when consumers cannot or do not want to gather information about a product (e.g. in the case of groceries), they tend to rely on external cues that are more easily accessible and require less processing than internal cues such as ingredients (Richardson et al., 1994).

We propose that matte package surfaces serve as a cue for content naturalness. This is because mattedness entails physical characteristics, i.e. inhomogeneity within the surface and diffuse reflections of light, that are indicative of organic substances (Karana, 2012; Nayar & Oren, 1995). Through this allusion to nature packaging mattedness is proposed to signal that the package contains a more natural, or less artificial, product. Given that consumers associate naturalness in food with superior quality we, moreover, propose a downstream effect on perceptions of tastiness. Importantly and because artificial products stand to gain the most, we also propose that the effect of packaging mattedness becomes especially pronounced among products low in inherent naturalness.

To test our propositions we conducted two laboratory experiments in which we manipulated packaging mattedness of grocery products.

Situated in a context of competitive product presentation (Silayoi & Speece, 2004), study 1 tested for the proposed effect of packaging mattedness on perceived product naturalness and a subsequent effect on perceived tastiness. In addition, it explored whether haptic experiences enhance these effects. This yielded a 2 (packaging mattedness: matte vs. glossy) x 2 (touch: yes vs. no) between subjects design. Each of the 136 participants (female=49%, M_{age} =21.8) was provided with two identical bottles of ketchup that just differed in terms of their mattedness. Participants were randomly assigned to evaluate either the matte package compared to the glossy one or vice versa, and to do so either with or without touching the package. We measured perceived naturalness of the ketchup contained in the focal package (1=more artificial, 7=more natural than the respective other package) and expected product tastiness (1=less tasty, 7=more tasty).

As predicted the product in the matte package (M=4.52, SD=1.27) was perceived to be more natural than the product in the glossy package (M=3.43, SD=1.16, F(1,132)=26.71, p<.001, $\eta^2=.17$). Whether respondents could touch the package or not did not affect perceived product naturalness (F(1,132)=0.04, p=.851). There was also no interaction effect. As predicted, mediation analysis with bootstrapping showed an indirect effect of packaging mattedness on expected product tastiness (CI₉₅[-1.00,-.37]).

Study 2 aimed to investigate the moderating role of inherent naturalness of the product category. Furthermore, the study expands the findings of study 1 to situations where both surface types are present but not explicitly compared to each other.

We applied a 2 (packaging mattedness: matte vs. glossy) x 2 (product category: artifical vs. natural) between-subjects design. Based on two pretests we chose the product category bottled drinks; soft drinks served as artificial and iced tea as natural subcategories. Each of the 240 participants (female=65%, M_{age} =23.1) was randomly assigned to one of the four conditions. We asked respondents to evaluate the drink contained in the package and assessed perceived naturalness (1=artificial, 7=natural), expected product tastiness (1=not at all tasty, 7=very tasty) and included purchase intention as an additional managerially relevant downstream consequence (1=very unlikely, 7=very likely).

As expected, the iced tea was perceived to be more natural (M=3.34, SD=1.45) than the soft drink (M=2.59, SD=1.33, F(1,236)=17.28, p<.001, η^2 =.07). In addition, we found the anticipated interaction effect of mattedness and product type on perceived naturalness (F(1,236)=4.11, p=.044, η^2 =.02) though there was no main effect of mattedness (F(1,236)=0.59, p=.444). The soft drink in the matte package was perceived as more natural (M=2.84, SD=1.32) than the one in the glossy package (M=2.34, SD=1.29, t(114)=2.06, p=.042). No such difference was observed for the natural product, i.e. the iced tea. Moderated mediation analyses likewise only confirmed a downstream effect on tastiness and purchase intention for the artificial soft drink but not for the more natural iced tea.

Results support our novel proposition that products in matte packaging are perceived to be more natural than products in glossy packaging. Furthermore, we show that the effect is moderated by the inherent naturalness of the product category such that the effect is especially pronounced among products low in naturalness. Emphasizing the importance of the effect we also find that it can render the perception of products in matte packages as more desirable. Via perceived naturalness, package mattedness translates into better perceptions of expected taste and higher intentions to purchase. Further highlighting the practical relevance, we find that the effect emerges regardless of whether consumers merely visually examine a package or actually touch it. This suggests that it emerges in in-store settings where consumers visually inspect many more packages than they touch. On the one hand package mattedness can be used to stress actual product benefits that consumers fail to perceive; on the other hand it may bear the risk of consumer deception.

References

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