



Extended Abstract | *The 1st Research Innovations in Sustainable Marketing: A Global Virtual Symposium*

Drowning in Single-Use Plastic: Do Nudges Increase Consumer Willingness to Choose Green Packaging for an Extra Charge?

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Keywords: consumer choice, sustainability, green products, active choosing, nudges, social norm

Article History: Published: 10 April 2023

Extended Abstract: During the COVID-19 pandemic, the amount of plastic waste has reached 8 million tons and is expected to exceed 800 million tons by 2050 (Cheng, 2021; Zuin & Kümmerer, 2022). Reducing plastic use in packaging and other areas can play a crucial role in combating climate change (Abnett, 2022). Researchers have long argued that well-designed choice architecture (CA) profoundly affects consumer behavior (Cronqvist & Thaler, 2004; Scheibehenne et al., 2010). CA refers to the practice of influencing choice by “organizing the context in which people make decisions” (Thaler et al., 2013, p. 438). Two common forms of choice architecture that have been compared in terms of their relative effectiveness are the default option nudge and active choosing. The default option nudge involves pre-selection of a given alternative so that the individual is automatically opted in and must select another option to opt out (Brown & Krishna, 2004). In active choosing CA, an option is not pre-selected, and the consumer is free to choose, although some have argued that nudge elements are inherent in active choosing CA as well (Sunstein, 2016).

To date, the consumer choice architecture literature in environmental contexts has focused on default option nudges. In addition, the vast majority

of these studies have examined default option effects for green energy service decision making. Thus, it is important to extend the literature by including other types of green consumer choice contexts such as selection of green versus nongreen tangible goods to increase generalizability. Furthermore, although researchers have shown interest in CA intended to increase pro-environmental consumption (Lehner et al., 2016; Schubert, 2017), studies that hypothesize and test enhanced CA effectiveness through message framing appear limited. Thus, the current investigation tests the potential of social norm message frames to positively increase CA effects on selection of green versus non-green product alternatives. In these studies, we compared the effects of active choosing CA to the default option nudge CA. Specifically, Study 1 tests the main effect of choice architecture (i.e., default option versus active choosing CA) as well as potential moderating effects of social norm messaging (i.e., descriptive versus prescriptive norm framing versus no message framing) on the choice of a green versus nongreen product. Study 2 extends the first study to a different context and adds a behavioral component to enhance external validity. Drawing on the theory of normative conduct, the results from both studies reveal that, compared to other conditions,



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active choosing CA, when paired with descriptive norm messaging, is the most effective option in terms of increasing the percentage of consumers choosing the sustainable alternative. Results from two studies indicate that presenting the choice between biodegradable and plastic take-out food packaging with an active choosing CA paired with descriptive norm messaging is the most effective approach compared to certain other choice architectures with nudges. Furthermore, Study 2 revealed that consumers exposed to descriptive norm (versus prescriptive norm) messaging expressed a more positive attitude toward the packaging selection experience. In addition, regardless of CA, prescriptive norm messaging did not increase selection of the sustainable option. Furthermore, prescriptive norm messaging (versus descriptive norm messaging) resulted in consumers having strong reactance. Such serious backfire effects suggest that inclusion of prescriptive norm messaging may cause negative feelings and damage the brand. From a theoretical perspective, to our knowledge, this is the first study to extend nudging theory to the consumer non-durable purchase context in general and choice of biodegradable versus plastic packaging in small-to-medium sized business settings in particular. Furthermore, we extend the previous literature by introducing and empirically testing the effectiveness of the nudging strategy reinforced with social norms. An important finding is that framing the nudge with social norms are not risk-free as they may generate potential negative effects. Given increasingly positive attitudes toward green consumption and the relatively small additional cost of using biodegradable packaging in this context, small-to-medium sized food retailers may be able to simply leave it up to consumers to decide by minimizing impacts on operating costs and reducing government's incentive to impose regulations. Supporting this recommendation is recent research showing that consumers are willing to pay small extra charges to help safeguard the environment (Gianopoulos, 2020). Study results suggest that businesses should exercise caution when designing default strategies with social norm messages. On the national level, while governments have taken actions to reduce the use of plastics by imposing regulations (EPA,

2022; Daniels, 2019), policymakers may now consider encouraging small-to-medium sized food retailers to offer 'consumers' green packaging at a slightly higher price..

Funding statement

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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Cite as

Kim, J., Kitkuakul, S., & Alden, D. (2023). Drowning in Single-Use Plastic: Do Nudges Increase Consumer Willingness to Choose Green Packaging for an Extra Charge?. *Business Research Proceedings*, 1(1), 46-48. <https://doi.org/10.51300/brp-2023-71>

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