

OPENNESS TO EXPERIENCE AS MEDIATOR OF THE RELATIONSHIP BETWEEN PRODUCT CREATIVITY AND PURCHASE INTENTION

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ABSTRACT

Although past studies have found a positive relationship between product creativity and purchase intention, little is known about the underlying process behind this relationship. The present study addressed this gap by examining the role of openness to experience in the relationship between product creativity and purchase intention. Participants (88 undergraduate students) evaluated creativity of a self-nominated product and reported the extent to which they are willing to buy the product, as well as their openness to experience. Analysis showed that there was a positive relationship between product creativity and openness to experience and these two variables were significantly correlated with purchase intention. Furthermore, mediation analysis supported that product creativity increases purchase intention indirectly through openness to experience. The findings shed light on the mechanism of how product creativity increases purchase intention and serve as an evidence for future studies to investigate how and what aspects of product creativity that enhance individual's sense of openness and purchase intention.

Keywords: *product creativity, purchase intention, openness to experience, mediation*

INTRODUCTION

The changing of market demand has driven organizations to expand their marketing strategy from providing appropriate services to product value. One of the factors that may enhance consumers' experience toward a product is creativity. The emphasis on product creativity has interested researchers to invest their efforts to understand the components of product creativity, develop assessment tool of product creativity, and investigate the influence of product creativity on consumer's perceptions (Horn & Salvendy, 2009).

Product creativity is defined as "the subjective judgment of a product to exhibit novelty and appropriateness that elicits an emotional response compatible with the judge's preferences" (Horn & Salvendy, 2009, p. 224). Research has shown that, compared to ordinary products, creative products are more attractive to consumers. Horn and Salvendy (2009) had participants to evaluate creativity of specific product (Study 1) and self-selected product (Study 2) and reported their attitude (i.e., purchase intention and satisfaction) toward the

product. It was found that product creativity significantly predicted participants' willingness to purchase and satisfaction. In other words, consumers are more willing to spend money for a product that is perceived as creative.

Although studies have shown that people tend to purchase creative products, little attention has been given to the underlying mechanism of the relationship between product creativity and purchase intention. Product creativity is conducive to willingness to purchase could be partly due to product creativity "not only adding quality and aesthetics to product features, but product creativity also allows consumers to feel an emotional impact and identity with the product" (Horn & Salvendy, 2006a, p. 156). In other words, product creativity may indirectly link with willingness to purchase. Therefore, it is theoretically and practically important to understand how product creativity contributes to willingness to purchase.

Studies have documented that characteristics of products may influence consumer's behaviors. Empirical evidence supporting this notion

comes from a study on the relationship choice of attractive products has with self-affirmation. Townsend and Sood (2012) hypothesized that choose of an aesthetic product may boost consumer's sense of self and therefore, a good design product will have the same effect as self-affirmation to increase acceptance of different perspectives. Townsend and Sood had participants to make choice of a product (e.g., coffee-makers) between two options. The researchers manipulated the favor of option (high vs. low) and attributes (design, function, hedonic) and randomly assigned participants to one of the six conditions. In the High/Design condition, for example, participants were encouraged to favor the high aesthetic product by giving the same price to the high and low aesthetic products. Whereas in the Low/Design condition, participants were led to favor the low aesthetic by pricing the high aesthetic product six times higher than the low aesthetic product. After the choosing of product, participants were instructed to indicate to what extent they agree (or disagree) with animal testing and followed by reading an argument that against their position. Consistent with their hypothesis, it was found that individuals who selected more aesthetic product reported that the argument was more convincing, valid, and reasonable. The effect, however, was not found on other attributes. In other words, the results suggest that aesthetic product increases openness to different point of view. Similarly, Shu and Townsend (2014) found that reading a high (vs. low) aesthetic annual report increased openness, which in turn, increased choice of the advocated (riskier or less risky) option for investment. Taken together, the findings indicate that a creative product may enhance consumers' openness to embrace new experiences and ideas.

Openness to experience is one of the personality traits in the Five Factor Model. Openness is a broad domain that can be conceptualized by characteristics such as imaginativeness, curiosity, originality, broadmindedness, and aesthetic sensitivity (Costa & McCrae, 1992). People with high openness are found to be creative and flexible (e.g., Jauk, Benedek, & Neubauer, 2014; Silvia et al., 2014). As a result, it is reasonable to believe that people who are open to experience tend to embrace and appreciate unconventional ideas and values.

Does openness to experience have any impact on buying behavior? Fujiwara and Nagasawa (2015a) investigate the relationship between personality traits and purchase intention for luxury brands. The researchers found that individuals who are high in openness to experience reported higher intention to purchase luxury food and car brands than those with low dimension of openness. In the follow up study, Fujiwara and Nagasawa (2015b) explored the role of several psychological factors (e.g., differentiation from others, conformity to group norms) in the relationship between openness and purchase intention. It was found that satisfying the need for differentiation from others people had stronger effect than other factors in predicting purchase intension. In other words, high openness individuals tend to purchase luxury brands because they want to be different from other people.

Taken together, it is argued product creativity may indirectly increase purchase intention through openness to experience. Specifically, exposure to a creative product leads people to become more open to different perspectives. The activation of one's openness to experience, in turn, enhances the willingness to buy novel products. However, few studies have directly examined these theoretical relationships. The present study aimed to address this gap by testing the mediating role of openness in the relationship between product creativity and purchase intention. Put differently, the main goal of the present study is to investigate whether and how product creativity positively influences consumer willingness-to-pay for the product. It is hypothesized that product creativity is positively associated with purchase intention and this relationship is mediated by openness to experiences.

METHOD

Participants and procedure

This study was conducted as part of a larger research project concerned with creativity enhancement. Participants were 88 students (59 men, 29 women) enrolled in a psychology course at a public university in Singapore. They ranged in age from 19 to 27 years old ($M = 22.70$, $SD = 1.76$). Most of them were sophomores (37.5%) and followed seniors

(32.95%), freshmen (18.2%), and juniors (11.36%). The students participated in the study in exchange for course credit. Regarding ethnicity, majority of them described themselves as Chinese (90.8%), 3.4% as Malay, 1.1% as Indian, and 3.6% as another ethnicity (one participants did not report).

This computerized study consisted of three parts. Participants were first instructed to nominate a creative product. Participants were then asked to rate how creative the product is and to indicate the extent to which they are willing to buy the nominated product. Finally, participants answered the openness scale and a demographic sheet.

Instruments

Product creativity. Two items were designed to measure product creativity. Participants were asked in the first item to nominate a product which they think is creative. The second item asked the participants to indicate to what extent they think the nominated product is creative on a 7-point scale, ranging from 1 (*a little creative*) to 7 (*extremely creative*).

Purchase intension. A single item was used to measure the extent to which individuals are willing to buy the nominated product on a 7-point scale, ranging from 1 (*very unwilling*) to 7 (*very willing/already have one*).

Openness to experience. Participants reported their preference of variety on a 5-point Likert-scale, ranging from 1 (*Disagree strongly*) to 5 (*Agree strongly*), derived from the Big Five Inventory (BFI; Benet-Martínez & John, 1998; John & Srivastava, 1999). A high mean score of the 10 items, after reverse scored item 7 and item 9, indicates high tendency to embrace variety. The internal consistency (Cronbach’s alpha) for the 10-item scale was below the suggested cutoff. The alpha coefficient, however, improved to .71 after removing item 9 (“Has very little artistic interests”).

RESULTS

Normality of the variables was supported with the exception of purchase intention. Therefore, purchase intention score was reflected and square root transformed prior to the further analysis. Pearson correlation analysis was conducted to examine the relationships among product creativity, purchase intention, and openness to experience. Table 1 shows the descriptive statistics and intercorrelation for the variables. Results showed the three variables were positively correlated with each other. The significant correlations provide preliminary support to our hypotheses.

Table 1. Descriptive Statistics and Correlation

		<i>M</i>	<i>SD</i>	1	2	3
1.	Product creativity	5.76	0.77	1		
2.	Purchase intension	2.02	0.33	.25*	1	
3.	Openness	3.46	0.50	.22*	.28**	1

Note. *N* = 88.

* *p* < .05, ** *p* < .01

Hayes’s (2013) PROCESS SPSS macro was used to test the hypothetical mediating role of openness in the relationship between product creativity and purchase intention using 10,000 bootstrapped sample. The indirect effect is considered statistically significant if the 95% bias-corrected confidence interval (CI) does not include zero (Hayes, 2013).

Mediation analysis on openness showed that product creativity was significantly related to

openness (*B* = 0.14, *SE* = 0.07, *t* = 2.06, *p* = .04) and the latter significantly predicted purchase intention (*B* = 0.16, *SE* = 0.07, *t* = 2.27, *p* = .03). Moreover, the relationship between product creativity and purchase intention (i.e., total effect or *c* path) was significant (*B* = 0.11, *SE* = 0.05, *t* = 2.43, *p* = .02). The direct effect of product creativity on purchase intention after controlling for the effect of openness was not significant (*B* = 0.09, *SE* = 0.05, *t* = 1.94, *p* = .06). More important, the results from 10,000

bootstrap samples revealed that the indirect effect of product creativity on purchase intention via openness was significant, $B = .02$, $SE = .02$, 95% CI [.002, .06].

DISCUSSION

This study examined the relationship between product creativity and purchase willingness and the role of individual personality (i.e., openness to experience) on the relationship. Several interesting findings were found. First, participants reported that they were willing to spend money for product they selected and rated as creative. The finding is consistent with past studies (e.g., Horn & Salvendy, 2009) that creative products are more attractive to consumers. Second, both product creativity and purchase intention were significantly related to openness. The findings suggest that individual differences play a critical role on the evaluation of product creativity and their decision to buy a product. Finally, mediation analysis showed that openness mediates the relationship between product creativity and purchase intention. In other words, exposure to (or recall of) a creative product evokes one's openness to ideas and concepts, which in turn, increases the intention to purchase the creative product.

Several limitations need to be addressed. First, participants rated the creativity of the product on a single item. Although use of single item may reduce burden of participant in responding to the survey and fits with the goal of this exploratory study, it is not able to have a clear picture of product creativity. To expand our understanding of the relationship between product creativity and purchase intention, researchers are suggested to employ other instruments, such as product creativity measurement instrument (Horn & Salvendy, 2009), Creative Product Semantic Scale (CPSS; Besemer & O'Quin, 1986, 1987, 1999; O'Quin & Besemer, 1989, 1999), to enrich the evaluation of product creativity. Using an extensive instrument may also allow researchers to examine what and how the different dimensions of product creativity may affect the buying behaviors.

In the same vein, caution should be given to the measurement of openness to experience. The

openness subscale of the BFI, which has been widely used for trait measurement in personality research, was applied in the present study to assess participants' openness. Therefore, the measured openness seems to be a trait-like, rather than a state-like, openness. Given that a trait is usually more stable than a state, one may argue that it is more plausible for product creativity to evoke a state, but not a trait, of openness. Note that, however, it is possible to activate a personality trait (see Mai et al. 2015 for). Indeed, Martindale (1989) concluded that exposure to a creative task may activate one's creative personality. Nevertheless, to minimize the confusion, future studies are recommended to employ both self-report and behavioral assessment of openness to experience. For example, openness to new ideas can be evaluated by the extent to which individuals choose overseas brands over local brands that are more familiar to them.

Third, caution should be given when interpreting the findings due to the small sample size. Moreover, focusing on university students has also limited the generalizability of the findings. Finally, just like other correlational studies, causal relationship cannot be drawn in the current study. Future studies, therefore, may replicate the current study findings with different population and asking participants to assess the same product. It is also interesting to know whether people's creativity may affect their perception of product creativity and their willingness to buy creative products.

Despite these limitations, the findings provide empirical evidence to show that attractiveness of creative products increases buying behavior indirectly through openness to new perspectives. The current study contributes to the literature by offering insight into the question why creative product is conducive to purchase behaviour.

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