



## Are Aesthetic Experts Willing to Take More Design-Based Risks than Non-Experts?

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*Background.* According to the Theory of Thresholds by Daniel Berlyne (Berlyne, 1974), stimuli with moderate aesthetic qualities stimulate more favorable responses than stimuli with extreme design characteristics. Additionally, moderate design aesthetics were shown to lead to lowest risk perceptions (XXX, 2018). However, consumers with differing aesthetic preferences may require products with more or less styling in the design (i.e., overstyling or stylistic minimalism), raising the question: is the aesthetic middle principle applicable across diverse consumers, who differ in their levels of aesthetic expertise? For a company's success it is important to reveal if distinct types of consumers moderate or influence the preference for the aesthetic middle with respect to perceived risks.

*Theory, Literature, and Hypotheses.* This study proposed that individual differences in aesthetic expertise moderate the aesthetic middle effect based on the Processing Fluency Theory by Rolf Reber, Norbert Schwarz, and Piotr Winkielman (Reber, Schwarz, & Winkielman, 2004). Specifically, based on this theory the perceiver's response to an object depends on the perceiver's fluency of processing, indicating that the more easily the perceiver is able to understand an object and its attributes, the more positive the response and attitude towards the object and vice-versa (Reber et al., 2004). Based on this account, the following hypotheses were tested: Consumers with low aesthetic expertise will perceive the lowest risks (a. psycho-social, b. functional, and c. financial) for products with moderate design aesthetics as compared to products with low design aesthetics (H1) or high design aesthetics (H2). Consumers with high aesthetic expertise will perceive the lowest risks (a. psycho-social, b. functional, and c. financial) for products with high design aesthetics as compared to those with low design aesthetics (H3) or moderate design aesthetics (H4).

*Methods.* The hypotheses were empirically tested among 120 female U.S. consumers (ages 21 to 41) through a 2 (Consumer Aesthetic Expertise: Low/High) x 3 (Product Design Aesthetics: Low, Medium, and High) quasi-experimental online study, with design aesthetics as a within-subjects factor and aesthetic expertise as a between-subjects factor. Two consumer groups, with low and high levels of aesthetic expertise profiled based on their occupation, design interest, and/or education and based on a design expertise task, were recruited through a national survey company. These two distinct groups were exposed in random order to products with three different levels of design aesthetics (low, medium and high) in an online-store setting. The stimuli were followed by dependent measures of perceived risks (psycho-social, functional, and financial) (Ha & Lennon, 2006; Liljander, Polsa, & van Riel, 2009; Stone & Gronhaug, 1993), manipulation checks (design aesthetics and design expertise) (Bloch, Brunel, & Arnold, 2003; Silvia & Berg, 2011). Prior to the main study, two pretests were conducted to select stimuli for manipulating design aesthetics (high,

moderate, low). Based on the pretests, the stimuli employed in the main study consisted of two chair designs for each level of design aesthetics.

*Results.* Preliminary analyses revealed the success of the manipulation of design aesthetics ( $M_{low1} = 2.13$ ,  $M_{low2} = 2.75$ ,  $M_{mod1} = 4.86$ ,  $M_{mod2} = 4.81$ ,  $p < .001$ ;  $M_{high1} = 5.30$ ,  $M_{high2} = 5.72$ ,  $M_{mod1} = 4.86$ ,  $M_{mod2} = 4.81$ ,  $p < .001$ ). Next, individual differences in aesthetic expertise were confirmed through independent samples *t*-test ( $M_{high} = 3.21$ ,  $M_{low} = 2.61$ ,  $p = .001$ ). The hypotheses were tested using repeated measures ANCOVA with age as a continuous covariate. For consumers with low aesthetic expertise, moderate ( $M_{mod} = 3.13$ ) design aesthetics led to lower psycho-social risk perceptions than low ( $M_{low} = 3.74$ ,  $p = .006$ ) and high design aesthetics ( $M_{high} = 3.71$ ,  $p = .001$ ), supporting H1a and H2a. Further for this group, functional risk perceptions were lower for moderate aesthetics ( $M_{mod} = 2.89$ ) than low design aesthetics ( $M_{low} = 3.54$ ,  $p = .002$ ) supporting H1b. Even though functional risk perceptions for moderate design aesthetics were not significantly lower than high design aesthetics ( $M_{high} = 3.13$ ,  $M_{mod} = 2.89$ ,  $p = .378$ ) results showed the proposed direction, but without reaching significance, rejecting H2b. Among consumers with low aesthetic expertise, financial risk perceptions were lower for moderate than low design aesthetics, but not significantly different ( $M_{low} = 3.89$ ,  $M_{mod} = 3.55$ ,  $p = .307$ ), rejecting H1c. However, significantly lower perceived financial risks for moderate than high design aesthetics were found for this group ( $M_{high} = 4.63$ ,  $M_{mod} = 3.55$ ,  $p < .001$ ) supporting H2c

For consumers with high aesthetic expertise, lower psychological-social risk perceptions were revealed for high as compared to low design aesthetics ( $M_{low} = 3.49$ ,  $M_{high} = 3.17$ ,  $p = .502$ ), however, without reaching statistical significance, rejecting H3a. Moderate design aesthetics led to lower psych-social risk perceptions than high design aesthetics ( $M_{high} = 3.17$ ,  $M_{mod} = 2.71$ ,  $p = .012$ ), which contradicted our hypothesis, rejecting H4a. Functional risk perceptions were lower for high compared to low design aesthetics ( $M_{low} = 3.62$ ,  $M_{high} = 3.09$ ,  $p = .036$ ), supporting H3b. However, moderate design aesthetics led to lower psycho-social risk perceptions than high design aesthetics ( $M_{high} = 3.09$ ,  $M_{mod} = 2.77$ ,  $p = .165$ ), which is contrary to what was predicted, rejecting H4b. Financial risk perceptions did not differ between low and high design aesthetics ( $M_{low} = 3.78$ ,  $M_{high} = 3.71$ ,  $p = 1.00$ ), rejecting H3c. Further, this risk was lower for moderate design aesthetics than high design aesthetics ( $M_{high} = 3.71$ ,  $M_{mod} = 3.13$ ,  $p = 0.003$ ), rejecting H4c.

In summary, the hypothesis testing revealed that consumers with low and high aesthetic expertise differed with respect to their risk perceptions for products with high versus low aesthetics qualities and were similar in their preference for products with moderate aesthetic qualities resulting in lowest risk perceptions.

*Conclusions and Implications.* For the success of new as well as existing brands and products, targeting the level of design aesthetics to the consumers' aesthetic expertise levels is important because high design aesthetic products may be more acceptable among consumers with advanced aesthetic expertise, but can fail with consumers who are novices in aesthetic appreciation. This study's findings suggest that when new products are introduced to a more general, undifferentiated market, then designs closer to the aesthetic middle may be most successful due to lowest risk perceptions among both aesthetic experts and non-experts. This lowered risk can stimulate greater new product adoption among general consumers.

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## References

- Berlyne, D. E. (1974). *Studies in the new experimental aesthetics: steps toward an objective psychology of aesthetic appreciation*. Washington; DC: Hemisphere Publishing Corporation.
- Braun, A. M. & Chattaraman, V. (2018). The Preference for the Aesthetic Middle: A Perceived Risks based Explanation. *International Textile and Apparel Association (ITAA). Annual Conference Proceedings*, 49.
- Bloch, P. H., Brunel, F. F., & Arnold, T. J. (2003). Individual differences in the centrality of visual product aesthetics: Concept and measurement. *Journal of Consumer Research*, 29(4), 551–565.
- Ha, S., & Lennon, S. J. (2006). Purchase intent for fashion counterfeit products: Ethical ideologies, ethical judgments, and perceived risks. *Clothing & Textiles Research Journal*, 24(4), 297–315.
- Liljander, V., Polsa, P., & van Riel, A. (2009). Modelling consumer responses to an apparel store brand: Store image as a risk reducer. *Journal of Retailing and Consumer Services*, 16(4), 281–290.
- Reber, R., Schwarz, N., & Winkielman, P. (2004). Processing fluency and aesthetic pleasure: Is beauty in the perceiver's processing experience? *Personality and Social Psychology Review*, 8(4), 364–382.
- Silvia, P., & Berg, C. (2011). Finding movies interesting: How appraisals and expertise influence the aesthetic experience of film. *Empirical Studies of the Arts*, 29(1), 73–88.
- Stone, R. N., & Grønhaug, K. (1993). Perceived Risk: Further Considerations for the Marketing Discipline. *European Journal of Marketing*, 27(3), 39–50.