



The Role of Need for Cognition in Consumers' Mental Imagery:
A Study of Visual Social Media of Fashion Brands

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Introduction “*Pictures are worth 1000 tweets*” (Meyers, 2013). In recent years, the shift from social media to visual content/image-based social media (e.g., Instagram, Pinterest) has received special attention from fashion marketers. This is perhaps not surprising as image is what they mainly sell. Indeed, fashion business makes use of visual social media for consumer relationship management and brand equity (Roderick, 2016); Michael Kors and Zara have reached a global audience of over 7 M and 10 M followers, respectively, on Instagram (Swant, 2015) to which they present product lines and lifestyle through visuals (e.g., photos, videos). By 2017, Instagram is expected to reach ad revenue of \$2.81 billion and over 400 million users (eMarketer, 2015). Despite its growing popularity, little research has focused on consumer behavior in visually-driven social media. A research question that naturally follows is: *How do consumers process visual messages in visual social media?* In answering the question, this study focuses on mental imagery as an underlying mechanism of visual message processing. The purpose of this study is twofold: (1) to explore how consumers' perceptions of fluency with visual messages affect mental imagery which in turn affects attitude towards fashion brands and (2) to examine if an individual difference variable (i.e., need for cognition) plays a moderating role in visual message processing in the context of Instagram.

Theoretical Background and Hypotheses This study builds on the concept of mental imagery that suggests consumers create vivid imagery in their mind when processing information (Jiang et al., 2014). Especially, visual messages (vs. plain texts) can elicit imagery effectively because they spontaneously evoke visual imagery in a consumer's mind. That is, a visual helps a consumer imagine him/herself using the object featured in it (Wyer, 2004). MacInnis and Price (1987) define this evoking-imagery as mental imagery reflecting the process in which picture-like experience is activated in one's working memory. As for antecedents to mental imagery, this study focuses on processing fluency, “the subjective experience of ease with which people process of information” (Alter & Oppenheimer, 2009, p. 291). Two types of processing fluency of our interest are comprehension fluency (the degree to which one understands visual information efficiently) (Chang 2013) and imagery fluency (the degree to which one can generate visual/figural description relevant to given visuals) (Petro & Cialdini, 2005). Mental imagery elicited from visuals further would influence consumer responses (attitude toward fashion brand). Accordingly,

H1. Comprehension fluency (H1a) and imagery fluency (H1b) positively impact mental imagery.

H2. Mental imagery positively impacts brand attitude.

Individual differences in cognitive activities may differentiate the processing fluency – mental imagery dynamics. In this study, we focus on need for cognition, an individual's tendency to devote to cognitive activities, as a potential moderator (Cacioppo & Petty, 1982).

H3. Need for cognition moderates the effects of processing fluency on mental imagery such that consumers with high need for cognition exhibit stronger impacts of comprehension fluency (H3a) and imagery fluency (H3b) on mental imagery compared with those with low need.

Methods and Results A web-based survey was used for data collection. Measurement items of research variables were adapted from previous studies. A total of 328 responses were recruited from Amazon Mechanical Turk. Participants were directed to explore a fashion brand page in Instagram (e.g., J.Crew or Gap) and complete the questionnaire based on the experience. Data analysis involved in three steps. First, a well-fitting measurement model was established using CFA with the maximum likelihood (ML) estimation (AMOS 23.0): $\chi^2(164) = 470.673$, $p = .000$, $\chi^2/df = 2.87$, RMSEA = .076, IFI = .954, TLI = .947 and CFI = .954. Reliabilities, convergent and discriminant validity were also confirmed. Second, SEM with ML estimation (AMOS 23.0) tested proposed hypotheses. The proposed model yielded a good fit to the data: $\chi^2(166) = 529.310$, $p = .000$, $\chi^2/df = 3.189$, RMSEA = .082, IFI = .946, TLI = .938 and CFI = .945. Next, SEM multi-group analysis was performed to test the moderation effect. The results indicated that the effect of imagery fluency on mental imagery was significantly moderated by need for cognition. Thus, all the hypotheses were supported except H3a (Figure 1).

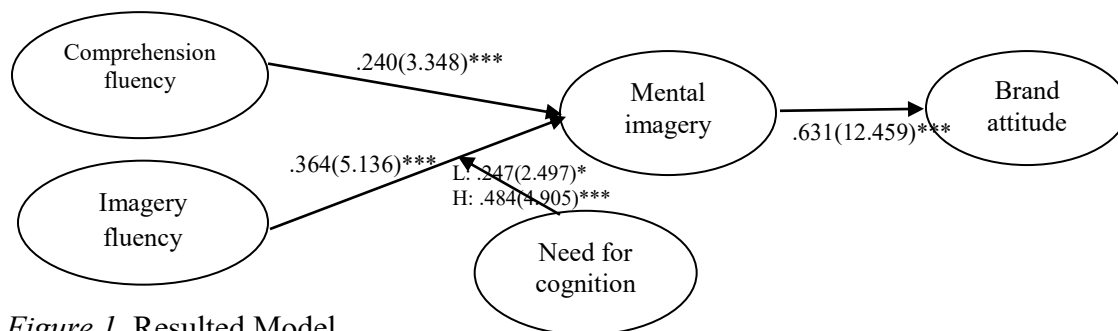


Figure 1. Resulted Model

Note. Numbers are standardized factor loadings and Critical Ratios (CRs) in parentheses. * $p < .05$, ** $p < .01$, *** $p < .001$

Discussion and Implications Our findings capture mental imagery as a core mechanism of consumer visual message processing in the context of fashion brand Instagram. Both comprehension fluency and imagery fluency influence mental imagery, which in turn cultivates positive attitude toward fashion brand. Interestingly, individual differences in need for cognition interact with imagery fluency in enhancing mental imagery: high need for cognition strengthens the effect of imagery fluency on mental imagery. The findings of this study illustrate the process of consumers' optimization of visual messages in visual social media, providing useful lessons for fashion marketers regarding visual social media branding strategies.

References available upon request