Full length article

Investigating moderating roles of goals, reviewer similarity, and self-disclosure on the effect of argument quality of online consumer reviews on attitude formation

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ABSTRACT

An online experiment ($N = 357$) examined how goals, reviewer similarity, and amount of self-disclosure interacted with review quality in the formation of an attitude about a product, and intended purchase of the product. Participants were given different goals (looking for experience attributes vs. search attributes) and shown reviews for a hotel before answering a questionnaire, to determine attitudes toward a target hotel. High quality reviews resulted in more favorable attitudes towards the hotel, which increased the purchase intention. A significant interaction emerged between reviewer similarity and review quality, suggesting that better quality reviews were expected from in-group members, than out-group members.

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1. Introduction

Because of the ubiquity of personal testimonials delivered by online review websites, consumers now have access to an environment filled with cues that can be employed when forming attitudes about products. This new environment, for product reviews, provides the opportunity for consumers to seek out multiple sources of information on any and all products that they may wish to purchase. When given the choice between product information from traditional sources such as print ads, personal selling, and mass media advertising and information from other consumers online, internet users put more trust in the latter (Cheung & Thadani, 2012). Indeed, previous research has demonstrated the influence of online reviews. For example, online reviews were predictive of book sales (Chevalier & Mayzlin, 2006) and box office revenue (Liu, 2006). As the influence of online reviews on people's perceptions and behaviors has been increasing, understanding of the mechanism of their influence is ever more important.

Given the abundance of cues existing in online reviews, it is important to understand how exactly the consumer's attitudes are shaped. The presence of some cues might affect how other cues are

judged, and thus may have greater or less influence on the user (DeAndrea, 2014; Van Der Heide, Johnson, & Vang, 2013; Walther & Parks, 2002; Walther, Van Der Heide, Hamel, & Shulman, 2009). To understand this possibly complex online review judgment process, the simultaneous examination of multiple types of information is necessary.

Using dual-processing models (see Chaiken, 1980; Petty & Cacioppo, 1981, 1986) as a guiding framework, the current study first focuses on the effect of argument strength of reviews on shaping people's attitudes about a target product. The main aim of this study, however, is to investigate potential moderators of the review quality effect on people's attitudes. The first moderator it presents is the types of goal consumers have. To be specific, we manipulate people's criterion to judge a target product (search attributes vs. experience attributes) and see if having different goals affects people's motivation to read online reviews carefully, thereby varying the review quality effect. Although previous literature mostly categorized each product into either search goods — goods that are easy to evaluate with product information — or experience goods — goods that are hard to evaluate before firsthand experience (e.g., Nelson, 1970, 1974; Senecal & Nantel, 2004; Weathers, Sharma, & Wood, 2007), the categorization is often criticized because most products contain both qualities (Wright & Lynch, 1995). Thus, this study manipulates which attributes people

should focus on and observes the different goals' impact. The second moderator is reviewers' similarity with a user. Research has shown that people have a tendency to make a bond with similar others and gather information from similar others (Haslam et al., 1996; Lazarsfeld & Merton, 1954). Given this finding, we predict people's motivation to read similar reviewers' messages carefully to be higher compared to dissimilar reviewers' messages. If so, similar reviewers are expected to increase the review quality effect. The third moderator is the amount of reviewers' self-disclosure. Reviewers' self-disclosure can serve as a heuristic to help judge the usefulness of the review message (Forman, Ghose, & Wiesenfeld, 2008). In addition, when it's included in a message, it can give a more personal touch to the review, making the review a personal narrative rather than a report. This study tests if the more self-disclosure increases the motivation to examine reviews attentively, thereby increasing the review quality effect.

In the following sections, the current study first discusses the effect of review quality on attitude formation in the framework of dual-processing models. After suggesting hypotheses to replicate previous findings about the effect of review quality, the current study puts forward three moderation hypotheses with goals, review similarity, and reviewer's self-disclosure as three separate moderators. These moderators are predicted to either increase or decrease the effect of review quality on attitude formation. An original web-based experiment was conducted in order to test these hypotheses.

2. Literature review

2.1. Review quality and elaboration likelihood model (ELM)

Review quality refers to the argument quality in a review message. A message is considered to have a strong or weak quality based on its relevance, timeliness, accuracy, and comprehensiveness (Cheung & Thadani, 2012). A strong review quality message reflects the attitude of the reviewer clearly, and contains how and why the reviewer has formed the particular attitude toward the target. The evidence used to support the reviewer's argument is often vivid and very specific. Weak review quality messages, on the other hand, simply contain the reviewers' subjective feelings, without any supporting evidence for the quality of the product (Park, Lee, & Han, 2007).

According to dual process theories of message processing, if an individual is motivated and has the ability to understand a message, they are more likely to differentiate strong messages and weak messages (Chaiken, 1980; Chaiken, Liberman, & Eagly, 1989; Eagly & Chaiken, 1993; Petty & Cacioppo, 1981, 1986). In the context of e-commerce, studies find that consumers are motivated and able to distinguish strong product reviews and weak product reviews and thus their product attitudes were affected by review quality (e.g., Lee & Shin, 2014; Park et al., 2007). Product attitudes, in turn, were found to affect the purchase intention of the products (Lee & Shin, 2014). To establish the basic causal model to investigate the review quality effect and how it interacts with other cues, the current study first attempts to replicate these previous findings of the effect of review quality on product attitudes and purchase intentions.

H1. High quality reviews affect product attitudes more strongly than low quality reviews.

H2. The more positive a product attitude is, the higher the purchase intention.

The quality of arguments, however, may not always determine how persuasive the review message actually is. For example, the elaboration likelihood model (ELM) postulates that "variables can affect the amount and direction of attitude change by: (A) serving as persuasive arguments, (B) serving as peripheral cues, *and/or* (C) *affecting the extent or direction of issue and argument elaboration* [emphasis added]" (Petty & Cacioppo, 1986, p. 132). Depending on the situational factors or other message factors that may affect the elaboration likelihood, the hypothesized review quality effect can be either enhanced or hindered.

Worth noting is that the ELM allows that one variable can serve as both a peripheral cue and a factor affecting the nature of elaboration. In fact, Petty and Cacioppo (1986) discussed the possibility that some variables often considered as peripheral cues such as the number of arguments or source characteristics may also serve to facilitate the discrimination between strong and weak arguments by affecting the level of motivation or ability. This study examines the role of three variables that may affect the extent to which review quality affects attitudes: goal (search/experience attributes), similarity with reviewers (similar vs. dissimilar), and amount of reviewer's self-disclosure. These variables can be categorized as peripheral cues in the ELM paradigm, since they do not provide additional information about the target product. However, they could affect the motivation to read review messages carefully and thereby change the nature of review quality effect, which is the focus of this study.

2.2. Goal: search vs. experience attributes

Nelson (1970, 1974) categorized products into two categories: search goods and experience goods. Search goods are products whose quality is easy to assess before firsthand experience because it is easier to gain objective product information about them. For example, a digital camera, a cell phone, or a laser printer have been used as search goods in previous studies (Mudambi & Schuff, 2010; Weathers et al., 2007) as their key features are objective (e.g., image resolution, storage, print speed) and can be easily compared among different products to assess its quality. Experience goods, by contrast, are products whose quality is hard to judge before firsthand experience because it is difficult to gain objective product information about them. Previous studies have used a music CD, and a video game as experience goods (Mudambi & Schuff, 2010; Weathers et al., 2007) as these products are judged in a highly subjective manner such as personal taste in music or game rather than objective features.

Even though most of previous research on search and experience goods compared two different products, each being representative of the category, the majority of products or services involve both search and experience qualities (Cooper-Martin, 1992). That is, some qualities of a product can be easily verified by simply reading a product description while other qualities of the same product need to be experienced firsthand to be verified. For example, a cellphone can be judged on either search attributes such as its capacity, weight, and color, or experience attributes such as its exterior design and user interface. To avoid the rather artificial categorization of experience goods and search goods, this study compares people's different goals with which they approach the same product rather than different products. Specifically, it compares when people focus on search attributes of a target product and when they focus on experience attributes of the same product.

As experience attributes are subjective and not easily verifiable by definition, the motivation to carefully examine the review messages may be low to begin with. People may not read reviews carefully enough to the extent that they detect whether or not reviews have sound arguments. In fact, in a study where the researchers compared an experience good (computer game) and a search good (vitamin), the effect of review quality on purchase intention was fully mediated by the product evaluation for the