



## Congruence Effects in Online Customer Reviews: The Mediating Role of Perceived Information Relevance

Garim Lee, University of Minnesota, USA  
Hye-Young Kim, University of Minnesota, USA

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### Introduction

Emotional review can elicit one's emotions to arouse purchase willingness, whereas rational review uses benefits highlighting product attributes. Then a question arises: Does the effectiveness of each review type vary depending on shopping orientation? To answer this question, this study investigated the congruence between a message appeal of online customer reviews and shopping orientation. The role of perceived information relevance, cumulative satisfaction and perceived risk on purchase intention were also examined.

### Research Background

Congruence represents a match-up, fit, and typicality effect (Fleck & Quester, 2007). Congruence facilitates the introduction of new products to a market by assisting consumers' processing of the message. An emotional appeal elicits consumers' emotions to arouse purchase willingness, whereas a rational appeal highlights consumers' benefits from product attributes (Kotler & Keller, 2008; Teichert et al., 2018). Hedonic and utilitarian shopping orientations have been widely discussed in the literature (Hirschman & Holbrook, 1982; Kang & Park-Poaps, 2010). From the perspective of congruence, emotional (vs. rational) review will lead to higher perceived congruence than rational (vs. emotional) review when shopping orientation is hedonic (vs. utilitarian) (H1). A consumer perceives online reviews as relevant if they provide the kind of information the consumer is searching for (Fileri & McLeay, 2014). Thus, a high level of perceived information relevance can be predicted by the congruence between shopping orientation and message appeal of online reviews (H2). Information relevance is positively related to information adoption from online reviews and purchase intention (Srivastava & Kalro, 2019). Therefore, perceived relevance will enhance purchase intention of a reviewed product (H3) and will mediate the relationship between a congruence perception and purchase intention (H4). Cumulative customer satisfaction is defined as an overall evaluation of past experiences with products or services purchased from a website (Seiders et al., 2005). The positive effects of cumulative satisfaction were found on trust, relationship with the website, repurchase intention, and customer loyalty (Lien et al., 2017). In this light, cumulative satisfaction with an e-tailer will have a positive effect on purchase intention (H5a). Also, the effect of perceived relevance on purchase intention will be stronger among those who have been satisfied with the e-tailer (H5b). Consumers perceive uncertainty about loss or gain especially in the e-commerce context (Kim et al., 2008). Perceived risk has been found to be a barrier to online shopping preference and purchase intention (Barnes et al., 2007; Kim & Lennon, 2013). Thus, perceived risk of shopping

at an e-tailer will decrease purchase intention (H6a). In addition, the effect of perceived relevance on purchase intention will be stronger among consumers who perceive a low risk (H6b).

### Method & Results

A 2 × 2 between-subjects experiment was conducted with 496 U.S. MTurk participants. The participants viewed a shopping scenario and a screenshot of the Amazon website including a product image, information, and an online review, and completed the questionnaire. Shopping orientation and message appeal of reviews were manipulated. All measurements were drawn from the past literature and modified to fit the context.

There was a difference between exposure to emotional and rational reviews in perceived congruence for hedonic shopping orientation, but the direction was opposite ( $M_e: 5.13, M_r: 5.45, t=-1.9701, p=.05$ ). The rational (vs. emotional) review led to a higher perceived congruence for utilitarian orientation ( $M_e: 4.93, M_r: 5.54, t=-3.81, p<.001$ ). Structural Equation Modeling (SEM) was conducted to test H2-H6. Exploratory factor analysis (EFA) was used to verify the unidimensionality of each multi-item scale. A measurement model using AMOS 26 with maximum likelihood estimation was then conducted. The results indicated an acceptable measurement model fit ( $\chi^2=270.97, df=108; \chi^2/df=2.51; CFI=.98; NNFI=.97; RMSEA=.06; SRMR=.03$ ). The results supported the internal consistency of all the constructs ( $CR>.80$ ). Variance extracted for all constructs were greater than .50. The results also support the convergent and discriminant validity of all of the constructs. The items of each scale loaded highly on its respective construct (t-values range from 12.85 to 27.04), providing evidence of convergent validity. As evidence of discriminant validity, none of the confidence intervals of the phi matrix included 1. The structural model was then estimated to test H2-H6. The results indicated an acceptable model fit ( $\chi^2=271.26, df=111; \chi^2/df=2.44; CFI=.98; NNFI=.98; RMSEA=.05; SRMR=.03$ ). Congruence ( $\beta=.95, p<.001$ ) had a positive effect on perceived relevance. In turn, perceived relevance ( $\beta=.75, p<.001$ ) had a positive effect on purchase intention. To test the mediation, the hypothesized model was compared to the model where a direct path from perceived congruence to purchase intention was added. A  $\chi^2$ -difference test was performed using the hypothesized model as a baseline. This difference in  $\chi^2$ -values between the two models, with one degree of freedom was insignificant ( $\Delta\chi^2=.00, p=.93$ ). Thus, perceived relevance fully mediates the effect of congruence on purchase intention. Cumulative satisfaction and perceived risk did not trigger significant direct effects on purchase intention. Multiple regression analysis indicated that cumulative satisfaction ( $\beta=.56, p<.001$ ) strengthened the effect of perceived relevance on purchase intention while the moderating effect of perceived risk was not significant.

### Discussion

Although consumers have hedonic orientations, rational reviews are still more effective. This may be because consumers shop online largely due to a utilitarian value rather than a hedonic value (Bridges & Florsheim, 2008) or the study used a big-ticket, technology product. As

expected, the effect of perceived congruence on purchase intention was fully mediated by perceived information relevance. Although perceived risk and cumulative satisfaction did not directly predict purchase intention, consumers who perceive high information relevance from a review are more likely to form purchase intention if they have been satisfied with an e-tailer over time. Marketers should be aware of the importance of rational reviews that heighten perception of congruence and information relevance. Kim and Gupta (2012) suggested that a certain type of review can be encouraged by providing tools in a non-offensive manner. Similarly, Amazon customers star-rate words for their purchased items. For example, the words for an automatic pencil include *easy to hold*, *weight distribution*, and *ergonomic*. Most importantly, marketers should find a way to remind consumers that the reviews are relevant to their shopping goals. For example, a question “Is this review helpful?” or “Is this review what you are looking for?” can facilitate consumers to perceive a high information relevance. Another way is by using a filter system where customers choose specific information from reviews. If consumers read the customized reviews, they are more likely to perceive higher information relevance, ultimately leading to the formation of purchase intention.

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