



How Do Novice Consumers Learn from Online Expert Reviews?

Zhuolan Bao¹(✉) and Michael Chau²

¹ School of Management and Economics, CUHK Business School,
The Chinese University of Hong Kong, Shenzhen, China
baozhuolan@cuhk.edu.cn

² Faculty of Business and Economics,
The University of Hong Kong, Pok Fu Lam, Hong Kong
mchau@business.hku.hk

Abstract. Expert-written product reviews are prevalent and could be in many forms, ranging from short textual descriptions to video-embedded blogs. For consumers, expert reviews can not only optimize their purchase decisions, but also play an important role in facilitating consumer learning. In this paper, we first draw on profession research and propose two focal elements that characterize the content of expert reviews, and then investigate the impact of expert reviews on consumers' product preferences and information consumption via the lens of preference construction theory and dissonance theory. With describing our experiment design to test the hypotheses, we seek to make contributions to the vast studies of online reviews by characterizing the expert review content, examining the effects of expert review on consumer judgments and offering a new perspective of distinguishing expert reviews and peer reviews in online markets.

Keywords: Expert reviews · Preference construction · Information consumption · Peer reviews · Online markets

1 Introduction

Purchase decision-making of a new product is a difficult and complex job for novice consumers, as they have little knowledge about the category and no idea of how to gather and organize product information [1]. According to preference construction theory, when attribute information is uncertain, consumers tend to build their attribute preferences by learning about product information that is most accessible to them [2]. Internet naturally nurtures such an environment that enables a consumer to obtain a large amount of product information. Product reviews are one of the most important information sources [3], and are extensively acquired and consumed by consumers to facilitate purchase decisions.

Among massive product reviews, expert reviews are of a special type, which contains reviews written by professionals and could be in many forms, such as textual posts [4], blogs [5], videos [6], or reviews with expert labels in online markets [7].

Prior research findings have revealed that expert reviews are influential to product consumption [7, 8], as well as the product's perceived quality [5].

Therefore, acknowledging the importance of expert reviews, many companies have started to endorse or ask experts to write positive reviews for their products [9]. But the explanations of expert reviews' impact on consumer perceptions are largely from the perspective of information credibility cues, which is more suitable for low involvement situations [10], or single-attribute product evaluation (i.e. using general attitudes, summary impressions or heuristics of the product to make judgement [11, 12]), such as when evaluating movie or book products. When it comes to a multi-attribute product, the evaluation needs consumers' higher level of involvement, and consumers would spend a large amount of time and efforts to make the right decisions [13].

Intuitively thinking, expert reviews should be more important in high-involvement purchase situations, given its potential in assisting consumers to understand the product attributes and relevant information. One relevant study by Gu and Park [14] also concluded that when evaluating a high-involvement product, external word-of-mouth (e.g. expert reviews) are more influential than internal word-of-mouth (e.g. consumer reviews on retailer-hosted websites). However, current research are largely neglecting investigations to such findings.

In this work, we set out to study the nature of expert reviews, and the mechanism of their impact on novice consumers in multi-attribute product purchases. We ask the following questions: (1) What characterize the content of expert reviews? (2) How do consumers learn from the expert review content? (3) Do expert reviews influence the consumption of peer reviews? To answer the questions, we start from profession studies and research on consumer preference construction, and then present a framework to investigate the distinctive role of expert reviews on consumers' preference construction and subsequent information consumption.

The remainder of the paper is arranged as follow. First, we will review the literature of expert reviews, and propose the characteristics of expert review content based on profession research. Next, we will develop our hypotheses via the lens of the preference construction theory and dissonance theory. After descriptions of our proposed methodology, we will discuss our potential contribution, limitations and opportunities for future studies.

2 Theory Development and Hypothesis Testing

2.1 Expert Reviews

Both expert reviews and peer-consumer reviews provide product experiences and evaluation, and both are shown to be influential in product sales or purchase intention [8]. Existing studies often differentiate the two by the size of their impact on consumer judgment. For example, review's expertise information is regarded as a peripheral cue which affects the persuasion process from the perspective of elaboration likelihood model [15]. Comparing to central cue information such as argument quality, review expertise is more influential when the product is of low personal relevance [10]. But when a product invokes more consumers' cognitive efforts, the central cue information

is more important for consumers' judgment. Besides the elaboration likelihood model, an alternative view emerges with the idea of perceived distance of information. It stated that people tend to take the words from others who are like themselves [16]. Therefore, the reviews or recommendations written by peers are perceived as more valuable than those written by professions [16, 17].

However, both explanations are catering to understanding people's reliance on reviews for low involvement product evaluation [11]. For multi-attribute products, a deeper inspection should be more appropriate to comprehend the role of reviews. We draw on studies of professions, and provide a third theoretical lens of analyzing the impact of expert reviews.

2.2 Profession in Reviews

Professionals are individuals who are specialized in certain knowledge area and willing to serve the public [18]. In the seminal work in educational research, Freidson proposed two broad features that characterize profession, (a) acquisition and especially trained application of an unusually complex body of knowledge and skills, and (b) an objective of serving the needs of the public, with particular emphasis on an ethical or altruistic approach toward clients [19]. Therefore, with a profession's review, we expect the review to deliver the two features, domain knowledge or skills of evaluating the product, and principled evaluation of the product.

Similarly, Alba and Hutchinson [20] defined consumer expertise in a broad sense that includes both the cognitive structures and cognitive processes required to perform product-related tasks successfully. First, cognitive structure is the way people organize information [21]. The more detailed the cognitive structure is, the better a person would discriminate between information units. Since consumers with higher level of expertise possess more comprehensive cognitive structures, they usually have more detailed ideas about the product or product category. Attribute knowledge is one of such structures. Expert consumers should have more refined, complete and veridical knowledge of the product attributes [20]. But for novice consumers, many scholarly works have shown that they could not actively organize effective information search to evaluate the product, and that they can only passively perceive the product from external environment [22].

Second, cognitive processes are a series of tasks that an individual does continuously in a specific context [23]. They are various and dependent on the context, such as to identify, categorize objects, compare or discriminate among them, make preference judgments and so on [23]. In a shopping context, cognitive processes could be applying certain decision rules for acting on their product knowledge, such as analyzing information, identifying and isolating what is important and relevant and so on. Among them, comparative processes are commonly used for evaluation [24]. As noted in prior research, human judgment is comparative in nature [25], comparative processes took place in human perception [26], attitude formation [27] as well as decision making [24]. Comparisons do not exist in vacuum, but they are generated on the ground of acquisition and use of knowledge [25]. While consumers with less expertise can barely commence the comparative processes when evaluating a product, professionals or

expert consumers are able to make comparative evaluation based on their product knowledge of attributes, as well as their knowledge of the specific market.

As professionals or expert consumers possess more highly developed conceptual structure of the product [20], the reviews would draw upon their extended knowledge structure and deliver more attribute-related thoughts and comparative evaluation of alternative products to equip others' understanding towards the product [28]. With the above discussions, we propose that expert reviews are characterized by two elements. The first is the information of product attributes' structure (PAS), which is defined as the overall structure of the product's important attributes. A complete PAS indicates a comprehensive and consumer knowledge structure delivered by the reviewer. The second element is the information of attributes' comparative evaluation (ACE), which is the attributes' comparative evaluation among different alternative products. The more detailed the comparison evaluation information is, the more cognitive processes and market knowledge of the reviewer is presented in the content.

Evaluating new products using online product reviews is increasingly common for consumers nowadays. It was reported that online shoppers are buying more of their purchases online rather than in stores, and that among them, most people make their product search online as well [29]. That is to say, a great number of consumers now acquire product information and construct their preferences in online information environment. Furthermore, online reviews, especially expert reviews, as one of the most important information sources, are of great influence for people to evaluate the product and make decisions [3, 5]. Therefore, given the situation, it is vital to develop understandings of how online reviews would influence consumers' product preferences and information consumption.

2.3 Preference Construction

Product attributes are at the center of product evaluation and preference formation [30]. A product could be assessed with a variety of attributes. Consumers might have their distinct needs and preferences for the various attributes. The constructive view of preference adheres to two tenets, (1) that the expressions of preference are constructed at the time the valuation is required, and (2) that the construction process will be shaped by the interaction between properties of human information processing system and properties of the decision task. [2, 31]. Many research has discussed the effects of choice and process variations on preference construction, concluding preferences that are highly labile and sensitive to contextual changes [2, 32].

Attribute preference construction could occur through learning about the various product information posted in the corresponding decision environment, especially when people are unfamiliar and inexperienced with the object [2]. This is because consumers may lack the cognitive resources to generated well-defined preferences, or because consumers bring multiple goals to a complex decision problem [31].

Existing studies have investigated the role of advertisements [33], recommendation agents [31] and online reviews [34]. One of their major findings is that when information about the attributes' importance is ambiguous, inclusion and highlight of a specific product attribute would affect the perceived importance of the attribute.

In the light of the numerous empirical evidence that the information environment may play an essential role in individuals' preference construction for multi-attribute products, we in this study, investigate the impact of expert reviews on consumers' attribute preference construction. In particular, we posit that expert reviews may influence the relative importance weight that consumers give to different attributes via the impact of the two types of embedded information, i.e. PAS information and ACE information.

This could be due to several mechanisms. First, for information processing with high involvement, the quality of information has a greater impact on persuasion [10]. As PAS provides a structural presentation of product attributes and ACE affords a horizontal comparison of attributes' performances among different products, more information cues (e.g. concreteness and informativeness) would be perceived by consumers [35, 36]. Therefore, expert reviews would be perceived as of high quality, which may lead to higher persuasive impact to novice consumers on product evaluation.

Second, the structural attribute information of product assessment supports consumers to learn from the expert reviews. When a novice consumer is evaluating a multi-attribute product, she would have a high motivation to know about the criteria that might be used to evaluate the product. The PAS and ACE content in expert reviews fits her needs at the spot and assists her learning of the product type. As the consumer's knowledge about the product increases, a higher confidence and efficacy to use the information would be yielded [37, 38], which in turn, increases the relative weight that consumer attach to the attributes in expert reviews.

Third, the product attribute-related information included in expert reviews could influence consumers' short-term memory. The attributes being discussed in the expert reviews would be more salient temporarily, hence heightening the perceived importance weight a consumer attaches to those attributes [31, 39]. Therefore, we hypothesize that,

H1. Expert reviews affect consumers by shaping their perceived importance of product attributes.

More specifically,

H1a. Product attributes structure information influences consumers' perceived importance of the attributes.

H1b. Comparative information of product attributes influences consumers' perceived importance of the attributes.

2.4 Peer-Review Consumption

Expert reviews are not the only information source that an online shopper has. As stated in prior literature, online reviews generated by peer consumers are influential in consumers' preference construction and decision-making process [34, 40]. An important follow-up question is whether and how consumers' early exposure to expert reviews would influence the absorption of peer reviews. Given that peer reviews could sway consumers' preferences [34], if expert reviews overpower the peer reviews,

marketers or platform managers will be able to promote and take the advantages of content from experts. So, besides affecting consumers' preference construction, early exposure to expert reviews is also expected to influence consumers' consumption of peer reviews.

As mentioned, information about attributes structure and comparative evaluation in expert reviews could be perceived of higher quality [35], which encourages higher level of information use by novice consumers [41]. With their increasing knowledge, consumers' confidence in the information source would also increase. According to dissonance theory, a human is not motivated to be right, instead, s/he is motivated to believe that s/he is right [42]. Thus, their confidence in experts may prevent them from learning extra information, leading to neglect and reduction of further information acquisition. Therefore, we hypothesize that,

H2. When consumers are pre-exposed to expert reviews, their consumption of peer review information would be reduced.

3 Proposed Methodology

We intend to utilize an experiment to directly manipulate expert review content to test our hypotheses. We create our experimental conditions in a 2 (complete vs. incomplete PAS information) by 2 (detailed vs. brief ACE information) between-subjects design. Participants will be given a purchase scenario and a piece of manipulated expert review. Then they will be asked to respond to our questions before and after we show them the peer reviews. As a control, we also include a condition where no expert review is shown to participants.

4 Potential Contribution and Limitations

4.1 Potential Contribution

First, our research proposed two elements to characterize the expert reviews from the lens of profession research. Our findings have the potential of enlightening content providers to generate more powerful content and marketers to make use of reviews and reform their marketing strategies.

Second, our research is among the first studying the impact of expert reviews on consumers' subsequent information consumption of peer reviews. Our paper will have both theoretical and practical implications on consumer behaviors in online markets. The results on consumer information consumption will further extend the research findings that expert reviews may influence the swaying effects brought by peer reviews.

Last but not least, our findings will lead to a better understanding of the differences between expert reviews and peer reviews. While a large number of studies examining online reviews exist, very few papers discussed their differences. By drawing on the profession research, our theoretical development and analysis on review content would provide another perspective of distinguishing the two types of online reviews.

4.2 Limitations

Our proposal has several limitations. First, when defining expert reviews, we only use comparison information as a representative of experts' cognitive processes delivered in an expert review. Other aspects, such as using logic, categorization and excluding alternatives may also be included. We call for future studies targeting on other content of cognitive processes presented in expert reviews. Second, we do not consider the impact of irrelevant attributes in our experiment. As we focus on the impact of expert reviews, which would rarely contain information about irrelevant attributes' information, we think it is more reasonable to avoid any distraction from those attributes. The third limitation is the arrangement of consumers' reading order. In our study, we are to investigate the impact of early-exposure of expert reviews. However, in practices, peer reviews, instead of expert reviews, may be exposed to consumers first when they are looking for the product information. We argue that as a first study to investigate the expert reviews on the subsequent information acquisition, our findings would build the basis for and shed light upon future studies to examine the topic with more depth and variation.

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