
Unhelpful and Unaware of It: A Dyadic Analysis of Online Product Reviews

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Abstract

Much research focuses on identifying characteristics that predict whether consumer reviews are perceived as helpful. In contrast, little is known about whether review writers themselves know if their reviews will be helpful or whether they can be provided with effective writing prompts to improve the helpfulness of their reviews. Across two studies, the evidence suggests that while review writers are overconfident, their reviews are most helpful when their attentional focus during writing is on others (versus themselves) and when reviewing products characterized predominately by search (vs. experience) qualities.

Keywords: Product reviews, Online reviews, Helpfulness, Overconfidence, Search goods, Experience goods, Attentional focus, Others-focused, Self-focused

1. Introduction

Online consumer reviews have become a pervasive source of product information in the marketplace. For example, YouGov (2022) reports that, on average, one-third of global consumers regularly use consumer reviews before purchasing homeware products, while a similar percentage do so before buying clothes. When asked which source of product information was most important in the shopping process, 34% of consumers listed online reviews, second only to search engines at 54%, and just ahead of online stores at 33% (Statista, 2023). Similarly, 37% of consumers say customer reviews and ratings help “a lot” (as opposed to “some,” “a little,” or “not at all”) when it comes to making them feel confident about product decisions (Pew Research Center, 2018).

Reviews provide value not only for consumers but also manufacturers, service providers, and retailers. Consumers use reviews as a form of word-of-mouth to acquire information about options and attributes that might otherwise be difficult or impossible to obtain prior to making a purchase (Hanna, Swain, & Smith, 2016; Smith, Menon, & Sivakumar, 2005; Tractinsky & Rao, 2001; Voight, 2007). Similarly, manufacturers and retailers have learned that facilitating review technologies leads to greater customer awareness as well as lower costs due to less need for direct communications and lower probabilities of product returns (Sahoo, Dellarocas, & Srinivasan, 2018; Swain, 2022).

Recent research in the areas of information systems and marketing provide a number of insights on the impact of product reviews in the marketplace. Reviews have been linked to outcomes such as profitability and viewership (e.g., Cui, Lui, & Guo, 2012; Sun, 2012), as well as website and product evaluations (e.g., Hu, Zhang, & Pavlou, 2009). To understand these effects, researchers have focused on

identifying the review characteristics that influence shoppers' perceptions of review helpfulness (Hong et al., 2017; King, Racherla, & Bush, 2014). This work finds that helpfulness is enhanced when reviews are perceived as diagnostic (e.g., Mudambi & Schuff, 2010), credible (e.g., Wu, 2013), and appropriate for the type of product (e.g., Weathers, Swain, & Grover, 2015).

A second stream of research on review helpfulness examines the motivations and characteristics of review writers (e.g., Dellarocas, Gao, & Narayan, 2010). While this stream of research has proven useful for understanding or predicting whether a person will write a review, it thus far offers little insight as to when or how eventual writers create reviews that readers deem helpful. The present research seeks to address this limitation in the literature.

2. Writers' Motivations

Prior research has documented a variety of motivations that lead consumers to write reviews. One motivation is to reward (or punish) sellers. Positive reviews allow writers to express their gratitude (Lafky, 2014), while negative reviews allow writers to express dissatisfaction (Dellarocas et al., 2010). A second motive some writers have is their concern for others, which they can express by warning others about deceptive or deficient products or by drawing attention to attractive products or promotions (Bronner & de Hoog, 2011; Cheng et al., 2019; Swain, Berger, & Weinberg, 2014). A third motive present in some writers is the need for self-enhancement. Writers can help maintain a positive self-image by associating the self with positive product outcomes and by disassociating the self from negative product outcomes (Dixit, Badgaiyan, & Khare, 2019; Gonçalves et al., 2018). Lastly, some writers have a desire to be heard or to be viewed as an opinion leader (Chai et al., 2023). Similarly, some writers like to feel like part of group by sharing in the exchange of opinions (Munzel & Kunz, 2014).

It is important to bear in mind that most contributors to online review writers are not professional writers or communication specialists. As such, it should not be surprising that many reviews are not deemed helpful by readers. Recognizing this, retailers and review aggregators often provide "tips" for writing helpful reviews. For example, Google, Trustpilot, TripAdvisor, and Yelp have variously instructed writers that reviews should follow certain guidelines such as focusing on facts, providing details, staying balanced, using proper grammar, avoiding pickiness, and remaining respectful.

However, little evidence to date supports the idea that providing writing instructions as to the content or tone of a review is effective for eliciting reviews that readers find more helpful. Drawing on persuasion theory, the present research investigates a different approach to prompting writers, one in which writers are not advised as to what to write about but instead from which perspective to write (Campbell & Kirmani, 2000; Friestad & Wright, 1994; Weathers, Swain, & Carlson, 2012). This approach is described in the next section.

3. Attentional Focus

When constructing a review, writers can focus their attention on themselves, or they can focus attention on others (especially other consumers interested in the same products). Attentional focus is readily observable in everyday communications, as it manifests in common linguistic mechanisms. For example, individuals tend to use personal pronouns such as "I" and "me" when communicating with a self-focus, whereas they tend to use others-related terms such as "you" when communicating with a

focus on others (Ickes, Reidhead, & Patterson, 1986; Pennebaker, Mehl, & Niederhoffer, 2003).

Since attentional focus is prominent in human interactions (Galinsky and Moskowitz, 2000), writers who adopt different foci may create reviews that differ in ways that have an impact on consumers' perception of reviews. Indeed, the ability to be more helpful to others by virtue of shifting attentional focus is well-recognized in the literature on frontline employee training (e.g., Korschun, Bhattacharya, & Swain 2016). Consistent with this prior research, it is argued that prompting writers to focus on others (versus themselves) results in greater perceptions of helpfulness among readers (Lei, Yin, and Zhang, 2021).

This is likely to occur for at least two reasons. First, when individuals focus their attention on others (versus the self), they are more likely to display empathic concern, leading others to perceive them as more caring and trustworthy (Goldstein, Vezich, & Shapiro, 2014). In the context of product reviews, this suggests that others-focused reviews will lead to positive feelings or associations that spill over to readers' evaluations of the review. Second, writers who place their focus on others (versus only themselves) are more likely to consider and address a broader range of information needs in their product reviews. This results in a higher probability that the information needs of a given reader will be met. Thus,

H₁: Writers who are others-focused (versus self-focused) will write reviews that are perceived as more helpful by readers.

4. Product type

Prior research suggests that the type of product reviewed is an important factor for understanding the potential helpfulness of a review (Hong, Xu, Wang, & Fan, 2017). Though there are different paradigms for classifying products, Nelson's (1974) search versus experience paradigm has proven particularly useful (e.g., Baek, Ahn, & Choi, 2012; Brunel & Swain, 2007; Jiménez & Mendoza 2013). The search versus experience paradigm distinguishes between products based on the extent to which consumers must experience the products prior to deciding which option to purchase. However, the emergence of online (and virtual) retail channels means that the search versus experience distinction can vary for the same product depending on which retail channel it is encountered (Carlson, Weathers, & Swain, 2016; Mittal 2004; Sun, Han, & Feng, 2019).

Thus, in the present research, the search versus experience distinction is conceptualized as the extent to which consumers feel that they need to evaluate a product in person. The greater the perceived need to evaluate a product in person, the more experience versus (search) qualities the product possesses. Thus, readers should generally perceive reviews of search (versus experience) products as more helpful since any information conveyed is more directly evaluable for search (versus experience) products. Additionally, readers are more likely to discount writers' communications about personal experiences as idiosyncratic. Thus,

H₂: Writers' reviews will be perceived as more helpful by readers for search (versus experience) products.

A further question of interest in the present research is whether any effects of a writer's attentional

focus differ depending on the type of product reviewed. For products that must be experienced in-person to be evaluated, readers may have an enhanced preference for reviews written with a self-focus since the writer possesses the relevant experience. In contrast, for search products, readers may have an enhanced preference for reviews written with an others-focus since the product information can be evaluated independent of the writer's personal experience. Thus,

H₃: Writers who are others-focused (versus self-focused) will write reviews that are perceived as more helpful by readers, with the effect being stronger for search (versus experience) products.

Two studies were conducted to test the effects of attentional focus and product type on the helpfulness of writers' reviews.

5. Overview of methodology

This research generated data from both sides of the online consumer review dyad (writers and readers). One group of consumers served as review writers. These consumers were randomly assigned to one of several experimental conditions, asked to write reviews, and then asked to predict how helpful they thought their reviews would be to readers. A second, independent group of consumers served as the readers and were asked to evaluate the helpfulness of the writer's reviews.

6. Study 1: Exploratory analysis of review-writers' self-predicted helpfulness

6.1. Participants, Design, and Procedure

While the research hypotheses focus on the conditions under which writers' reviews are perceived as helpful by readers, Study 1 provides context by exploring writers' perceptions of their own reviews. A total of 24 participants (41.7% female, M_{age} = 31.4 years) were recruited to serve as review writers. The writing experiment employed a 2 (product type: search or experience) × 2 (attentional focus: self or others) between-subjects design. Writers were assigned to review either a search product (e.g., portable battery chargers, game consoles) or an experience product (e.g., shoes, pants) that they had recently purchased. They were then provided varying writing prompts depending on which attentional focus condition they were assigned to:

Self: *"The purpose of writing a product review is to express yourself. Experts have noted that the best product reviews are those that are written with your own product needs in mind. Please write a brief review that focuses on how the product did (or did not) satisfy your personal needs."*

Others: *"The purpose of writing a product review is to help other people. Experts have noted that the best product reviews are those that are written with other people's product needs in mind. Please write a brief review that focuses on the likely questions or concerns that other shoppers might have about the product."*

6.2. Measures

After completing their review, writers were asked to predict how helpful their review would be to readers: *"Imagine that 100 people read your product review. How many do you think would rate it as 'helpful' (versus 'unhelpful')? Please type a number between 0 and 100."*

To check the manipulation of product type, writers were provided with a 7-point Likert item (1 = Strongly disagree and 7 = Strongly agree), “*The product I reviewed is one that a person needs to evaluate in person.*” Greater agreement with this item indicated that the product was perceived to be an experience type rather than a search type. An independent samples t-test confirmed the success of the manipulation ($M_{\text{Experience}} = 4.83$ versus $M_{\text{Search}} = 3.58$, $t_{22} = 2.31$, $p = .03$). To check the manipulation of attentional focus, writers were asked whether they focused on their personal needs or the needs of other shoppers when writing. Their responses were coded as correct or incorrect based on their experimentally assigned condition. A binomial test confirmed the success of the manipulation, with the rate of correct responses significantly exceeding the rate one would expect if the writers were guessing (87.0% versus 50.0%; $z = 3.69$, $p < .001$).

6.3. Results

As shown in Table 1 and Figure 1, the writers predicted that their reviews would be helpful to a large majority of potential readers ($M_{\text{Overall}} = 68.8\%$). Additionally, the writers’ predictions did not differ by product type ($F_{1,18} = 0.01$, $p = .91$), attentional focus ($F_{1,18} = 0.05$, $p = .82$), or the interaction of the two ($F_{1,18} = 0.01$, $p = .94$). These results indicate that writers are broadly confident in their ability to write helpful reviews, thus setting the stage for a comparison with readers’ perceptions. Study 2 was designed to enable such a comparison and to test the research hypotheses.

Table 1. Model for review-writers’ self-predicted helpfulness

	Sum of Squares	df	Mean Square	F	p
Product Type	1.50	1	1.50	0.003	0.95
Attentional Focus	37.50	1	37.50	0.080	0.78
Product Type * Attentional Focus	8.17	1	8.17	0.018	0.90
Residuals	9323.33	20	466.17		

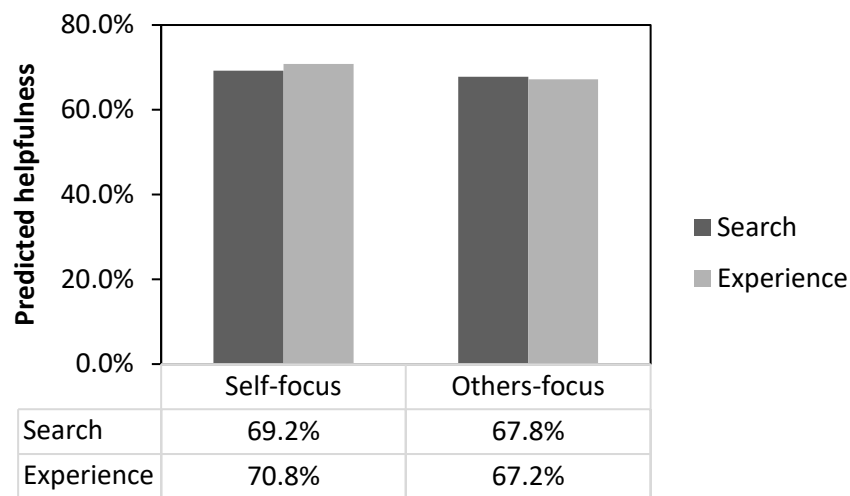


Figure 1. Results for review-writers’ self-predicted helpfulness

7. Study 2: Readers' predictions about the helpfulness of the review-writers

7.1. Participants, Design, and Procedure

The reviews written by the participants in Study 1 were shown to a second group of 172 participants (readers) in Study 2 (45.9% female, $M_{age} = 33.0$ years). These readers were randomly assigned to one of the products reviewed by the writers. For their assigned product, readers saw three different reviews and were instructed to, "Read the three reviews below and imagine you are actually shopping for each product." Thus, the effective sample size of reviews in Study 2 is $3 \times 172 = 516$. Since the readers were assigned to the reviews written by the writers, Study 2 inherits the experimental design of Study 1 with respect to the stimuli.

7.2. Measures

After seeing each of the three reviews for a second time, the readers in Study 2 were first asked, "If 100 other shoppers read this review, how many do you think would rate it as 'helpful' (versus 'unhelpful')? Please type a number between 0 and 100." They were then asked, "Was this review helpful to you?" (Yes or No). To check the manipulation of product type (from the perspective of the readers), a 7-point Likert item was provided (1 = Strongly disagree and 7 = Strongly agree), "*The product I reviewed is one that a person needs to evaluate in person.*" An independent samples t-test confirmed the success of the manipulation ($M_{Experience} = 4.71$ versus $M_{Search} = 3.39$, $t_{607} = 12.4$, $p < .001$).

7.3. Results

The analysis of the Study 2 data examines how helpful the writers' reviews were, as indicated by readers' personal assessments (i.e., the true helpfulness of the reviews). This allows for an assessment of the accuracy of the writers' predictions about the helpfulness of their reviews. Overall, the writers were overconfident. Whereas Study 1 revealed that writers predicted that their reviews would be helpful for 68.8% of readers, readers only rated their reviews as helpful in 60.7% of cases.

Since the dependent variable is binary ("*Was this review helpful to you?*" Yes or No), the data were submitted to a generalized linear mixed model with a logit link function. As in the first analysis, the fixed effects are product type, attentional focus, and the interaction of the two. Additionally, a random effect (on the model intercept) was included to account for the individual reviewers. The model provided a good fit to the data, with a marginal $R^2 = .158$ and conditional $R^2 = .175$. The Intra-Class Correlation was .020. Table 2 displays the results of the model estimation, while Figure 2 displays the estimated marginal means by experimental condition.

Table 2. Model for readers' personal assessments of review helpfulness

Names	Estimate	SE	Z	p
(Intercept)	-0.43	0.10	-4.25	< 0.001
Product Type (0 = Search, 1 = Experience)	-0.84	0.20	-4.11	< 0.001
Attentional Focus (0 = Self, 1 = Others)	1.40	0.21	6.66	< 0.001
Product Type * Attentional Focus	-0.08	0.04	-0.21	0.837

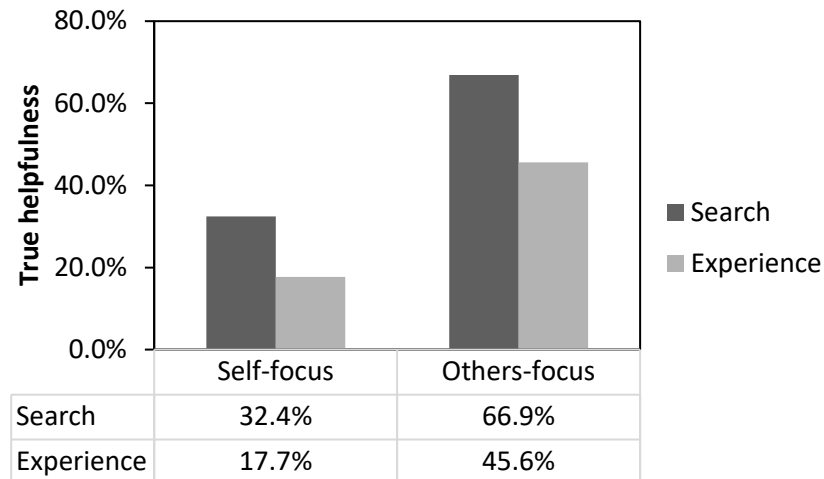


Figure 2. True helpfulness of writers' reviews

Consistent with H_1 , there was a significant main effect of attentional focus such that a higher percentage of readers found writers' reviews more personally helpful when writers' attentional focus was on others rather than the self (Others-focus: 56.6% vs. Self-focus: 24.3%; $B = 1.40$, $z = 6.66$, $p < 0.001$). Simple contrasts revealed that the advantage for others-focused reviews existed for both search products (others-focus: 66.9% vs. self-focus: 32.4%, $z = 5.16$, $p < 0.001$) and experience products (others-focus: 45.6% vs. self-focus: 17.7%, $z = 4.56$, $p < 0.001$).

Consistent with H_2 , there was a significant main effect of product type such that a higher percentage of readers found writers' reviews more personally helpful for search products than experience products (search: 49.6% vs. experience: 29.8%; $B = -0.84$, $z = -4.11$, $p < 0.001$). Simple contrasts revealed that the advantage for search product reviews occurred whether writers' attentional focus was on the self (search: 32.4% vs. experience: 17.7%, $z = 2.74$, $p = 0.006$) or on others (search: 66.9% vs. experience: 45.6%, $z = 3.18$, $p = 0.001$).

Contrary to H_3 , the interaction between attentional focus and product type was not significant ($B = -0.08$, $z = -0.21$, $p = 0.837$). That is, the effects of attentional focus and product type on perceptions of review helpfulness are additive.

8. Discussion and future research

Across two studies, the evidence suggests that while review writers are overconfident, their reviews are most helpful when their attentional focus during writing is on others (versus themselves) and when reviewing products characterized predominately by search (vs. experience) qualities. These findings hold managerial implications, as reviews that are more helpful are more valuable and influential for consumers. Further, retailers can benefit from being able to anticipate which reviews are likely to be helpful and promote them to the.

The present research also holds implications for review platforms since helpful reviews are "stickier" for consumers and enhance engagement with the platforms (Mudambi and Schuff 2010). Retailers and review platforms can also consider incorporating attentional focus as a writing prompt. Additionally, advances in text-based analyses (e.g., natural language processing) allow for large-scale, automated

detection and analysis of drivers of helpfulness such as attentional focus and product type.

This research also presents several opportunities for future research. First, the two studies reported here involved reviews for selected product categories. More product categories should be considered to further test the usefulness and scope of the search-experience paradigm. Second, attentional focus was varied by prompting writers to focus on others or on the self. Less obtrusive prompts may be of interest, such as encouraging writers to use first-person pronouns (to encourage self-focus) or encouraging writers to only use second-person pronouns (to encourage adoption of an others-focus). Third, future research is needed to explore additional outcome variables beyond perceptions of the helpfulness of a review. For example, brands and retailers may be interested in understanding the impact of writers' attentional focus on product-related beliefs, attitudes, and intentions to purchase.

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