The Effects of Compensation Disclosure and Consensus on Perceptions of Online Product Reviews

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Abstract

Online product reviews are an influential source of information during a purchase decision. This has drawn the attention of some marketers who attempt to manipulate the reviews by compensating reviewers for favorable reviews. In response, the FTC has mandated disclosure of any compensation the reviewers receive. Using Prominence-Interpretation Theory and Social Validation theory, this work explores the competing impacts of compensation disclosure and review consensus on credibility and helpfulness of reviews. A 3 (no disclosure, disclosure with no warning, disclosure with warning) x 2 (consensus, disagreement) experiment was conducted (N = 267). Compensation disclosure decreased credibility and helpfulness for all reviews. But, this effect was moderated by the provision of consensus information. Disagreement among reviewers enhanced the effect of a compensation disclosure, but consensus among reviewers mitigated the disclosure’s effect. Warnings about potential conflicts of interest prior to encountering a disclosure did not impact credibility and helpfulness.

1. Introduction

One of the more useful aspects of shopping online is the ability to consult the reports of others who have purchased the product one may be considering. Individuals are increasingly turning to online product reviews for advice and guidance concerning the quality of the products they are considering. Neilson Online reported that eight in 10 individuals doing holiday shopping consulted online product reviews before they made a purchase decision [1]. Not only do individuals read online product reviews, reviews can have a significant impact on perceptions of products. Favorable product reviews can significantly influence potential buyers’ attitudes towards products and their purchase decisions [2-4]. In fact, positive reviews from widely recognized sources (e.g., The Wall Street Journal) can result in increases in revenue that vastly outweigh other marketing efforts [5].

Marketers have taken note and some companies attempt to control or manipulate the online reputation of their products. The list of companies caught trying to manipulate the online reputation of their products ranges from electronics manufacturers [6] to mobile application developers [7]. Frequently, this manipulation takes the form of compensating individuals to favorably review products in various online forums [e.g., 6]. For example, product review sections of vendor websites, independent review sites, and blogs may all be locations where paid-for reviews appear. Indeed, several online services connecting bloggers and posters with marketers seeking to promote their products now exist (e.g., payforpost.com, izea.com).

In response, the Federal Trade Commission (FTC) has mandated that those who provide online reviews of products and receive compensation for those reviews (via payment or free products) must disclose the compensation to potential readers [8]. This mandate has been the topic of much debate among those who provide product reviews and many who contribute online product reviews are worried about the effects of a disclosure mandate. Despite the debate and worry, very little systematic research has examined the effect of compensation disclosure. This exploratory work addresses this gap and explores the impact of compensation disclosure on attitudes about product reviews and the potential mitigating effect that review consensus may have.

To frame this work, Prominence-Interpretation Theory (PIT), as formulated by Fogg [9], is used to examine how disclosure may adversely impact attitudes about product reviews. Within the framework offered by PIT, Social Validation Theory [10] is leveraged to examine the impact of consensus in online product reviews. Each of these theories is discussed below and hypotheses based on these theories are presented in following section. An empirical study
testing the hypotheses is presented and the results of the study are then discussed.

2. Theory and hypotheses

Prominence-Interpretation Theory was designed to address how people determine the credibility of communicators in an online environment [9]. Although there has been a great deal of attention devoted to credibility in the areas of psychology [e.g., 11], communication [e.g., 12], and management [e.g., 13], the unique characteristics of the online environment fundamentally change how credibility is assessed online [14]. Perhaps the most significant departure from traditional credibility research that is afforded by online communication is the potential for complete separation of the message from the source [14]. Traditionally, credibility has been judged in terms of characteristics of a communicator (e.g., through trustworthiness and expertise) [e.g., 15], however, in an online environment, such cues may be limited or completely absent.

PIT was specially designed for the online environment where the message source may be completely divorced from the message. It was originally developed to explain how people assess the credibility of entire websites [16]. In this work, the application of PIT is expanded to portions of websites, namely online product reviews.

The central premise of PIT is simple: that the impact of cues meant to enhance (or potentially detract) from credibility is driven by a cue’s prominence and interpretation. Prominence is the likelihood that the cue will be noticed by a user [9]. For example, a link to a disclaimer at the bottom of the webpage may have lower prominence than a link near the top of the page. Interpretation is the valenced judgment of the user [9]. For example, a broken link on a webpage might be interpreted as a sign of neglect or unplanned development and may be detrimental to credibility. Taken together, prominence and interpretation determine the impact of credibility cues as shown in Figure 1. Through systematic research, Fogg and colleagues have demonstrated that there are numerous factors that influence prominence and interpretation [9, 17]. These factors are also shown in Figure 1.

![Figure 1. Factors that influence the prominence and interpretation of a credibility cue.](image)

Further, online product reviews are frequently rated on helpfulness. Helpfulness ratings are often used to evaluate and rank product reviews (e.g., Amazon helpfulness ratings). These ratings are contributed by potential customers who value the reviews and rate them as helpful or not helpful. On large retail websites (e.g., Amazon.com), reviewers who contribute helpful reviews receive notoriety from potential customers and attention from marketers. Thus, the helpfulness rating is a measure of importance to the reviewer because it partially captures how influential a review may be. Therefore, the effect of prominence and interpretation on helpfulness will also be explored in this work. This work makes no claim regarding the relationships between credibility and helpfulness. It only acknowledges that together they capture how influential a product review may be and that they are likely correlated.

2.2. Prominence and interpretation of compensation disclosure

Prior to the FTC mandate that product reviewers disclose if they receive compensation for their product reviews, product reviewers had the option of disclosing any compensation. Fearing that potential customers may treat product reviews differently if they knew that reviewers were receiving compensation, the FTC required disclosure. Thus, by mandating disclosure, the FTC required prominence of a cue of credibility that was previously hidden or haphazardly disclosed to potential customers. As disclosure of any compensation makes salient the potential for a conflict of interest on the part of the product reviewer, the prominent cue of compensation disclosure should reduce the level of credibility and helpfulness attributed to the reviewer.

**H1:** Disclosure of compensation for a product review will decrease the a) credibility and b) helpfulness of a product review.
While disclosure of compensation (e.g., “The reviewer received compensation for this review”) may increase the prominence of a credibility cue, the interpretation of that cue may be unclear. For example, a potential customer may not realize the potential for a conflict of interest from a short disclosure statement because the source of the compensation and its potential influence over the contents of the review may remain unstated. Thus, the potential customer is left to herself to determine the connection between disclosure and credibility and helpfulness impacts. Limited or absent interpretation of disclosures may staunch any adjustments to assessments.

Conversely, a clear warning about the potential for a conflict of interest should make clear the interpretation of compensation disclosure. Such a warning would be administered prior to coming in contact with a disclosure statement and would make the meaning of the disclosure statement clear. According to PIT, warnings should have an additive effect above the effect from compensation disclosure and would decrease credibility and helpfulness.

\[ H2: \text{Warning of potential conflicts of interest in product reviews prior to encountering a compensation disclosure will result in a greater decrease in the a) credibility and b) helpfulness of a product review than if the warning had not been given.} \]

### 2.2. Consensus of product reviews

While compensation disclosure cues that have prominence and interpretation may be a detriment to credibility and helpfulness they are not the only cues to which potential customers may attend. There may be other cues that may moderate the influence of compensation disclosure. These cues likely fall into two categories: internal cues that the reviewer herself provides (e.g., identity cues that establish expertise) or external cues that are provided by some entity apart from the reviewer (e.g., review consensus). Since compensation disclosure will likely undercut the influence of any internal cues, this study focuses on the influence of cues external to the reviewer.

Among the most powerful of external cues on credibility is social validation [10]. In an online, product review setting, this is demonstrated by consensus of product reviews (e.g., product reviews that are consistently good). As Simon noted, human decision makers are cognitive misers [18] and social validation is an accessible, reasonable heuristic for determining the quality of a product. However, social validation is more than just a convenient heuristic for determining quality, it is a way to alleviate uncertainty regarding the decisions a potential customer must make. When potential customers face uncertainty introduced from a review provided by a reviewer harboring a potential conflict of interest, uncertainty regarding the review and quality of the product may dramatically increase. Therefore, potential customers may turn to others who have made similar decisions to reduce uncertainty about the quality of the product. If many other reviewers came to the same conclusion as the reviewer who disclosed compensation, the effect of compensation disclosure may be dampened. However, the extent of this dampening effect must be explored.

From the perspective of PIT, consensus cues operate in a fashion similar to compensation disclosure cues, but in the opposite direction. Consensus will positively impact assessments of credibility only if the consensus cues have prominence and interpretation. On a product review webpage, consensus cues are one of the most prominent pieces of information on the page. The cues usually take the form of summary rankings of product quality and are almost universally available from websites which offer past customers the chance to rate product quality. Figure 2 displays consensus cues from popular online retailers. With the wide availability and easy access to consensus cues, it is not through prominence that consensus cues may mitigate the negative effects of compensation disclosure. Rather, it is through interpretation that consensus cues may dampen the effect of compensation disclosure. The presence of a disclosure statement may decrease the credibility and helpfulness of a product review, but the interpretation of the statement may be more or less clear depending on the consensus of the other reviewers.

![Figure 2. Consensus cues from popular online retailers (Amazon.com on left; newegg.com on right)](image)

It is posited that when there is high consensus between the majority of the reviewers and the reviewer who discloses compensation agrees with the consensus, the effect of the disclosure will be mitigated to a large degree by consensus of the other reviews. In this case, the disclosing reviewer joins with the majority of reviewers and the interpretation of the disclosure statement is unclear. In writing the review, the reviewer may be motivated because of compensation, benevolent desires to disseminate information, or some other obscured combination of motives. However, when there is disagreement among reviewers (e.g.,
there is variation in product reviews, some positive some negative), the interpretation of the disclosure statement will be more clear. A potential customer reading the review will be more likely to attribute a positive rating to the compensation and should find the review less credible and less helpful. Hence:

**H3: Consensus will moderate the effect of compensation disclosure such that the difference in a) credibility and b) helpfulness between disclosure and nondisclosure conditions will be greater when there is no consensus versus when there is consensus.**

### 3. Method

To examine the hypotheses and research question suggested above, an experiment was constructed wherein participants were exposed to disclosure statements under varying levels of consensus information. The experiment was a 3 (nondisclosure vs. disclosure with no warning vs. disclosure with warning) x 2 (consensus vs. disagreement) factorial design (N = 267).

Each participant was invited to participate via an online solicitation and public announcements. To participate in the study each participant followed a web link to an online survey where they completed items concerning their attitudes toward product reviews and how they used them. They were randomly assigned to one of the 6 conditions and viewed two web pages and filled out items concerning their attitudes about the product reviews they read (e.g., credibility and helpfulness). The attitudes about the initial product reviews the participants saw are part of a separate study and its findings are not reported here. Results reported here are based on data recorded in response to the latter product reviews the participants viewed.

#### 3.1. Participants

Participants were recruited from an introductory Management Information Systems (MIS) class at a large mid-western University. The MIS class is required for all business students and for a number of students outside the college of business. As incentive, the students were promised course credit for participating in the study. The average age of the participants was 20.1, the participants had an average of 2.3 years of education after high school, and of the 267 participants, 51.3 percent were female. In terms of ethnicity, 13 said they were African-American, 15 were Asian-American, 202 individuals identified themselves as Caucasian, 14 were Native-American, 6 were Latin-American, and 17 participants did not fit into provided categories or did not respond.

In addition to standard demographics, participants were also queried regarding benevolence of product reviewers [19] to determine expectations regarding product reviewers. On a seven point, Likert scale, participants reported that they were neutral toward reviewers being likely to care for their welfare (M = 4.1), keep their best interests at heart (M = 4.0), and be concerned about them (M = 3.7). Further, when queried about the percentage of reviews they had read for which they suspected reviewers received compensation following the experiment, the average reported percentage was 17.4 percent. Finally, when asked about their feelings about marketers compensating reviewers for product reviews, most agreed that compensating reviewers is a conflict of interest (M=5.5) and is a deceptive practice (M=5.6). These responses, taken together, suggest that the participants were not naïve to the practice of compensated product reviewing and that most thought the practice was unethical.

#### 3.2. Measurement

**3.2.1. Independent variables: disclosure and consensus** Based on the condition of the participants, they viewed slightly different retail product webpages. All pages contained product information for a Sony digital camera and were intended to replicate product webpages from popular online retailers. The pages were adapted from an actual retail product webpage [20] and contained an image of the product, sections addressing pricing, shipping information, manufacturing description, and a single product review. The webpage in each condition contained exactly the same information. A portion of a sample webpage in the Disclosure; Consensus condition is shown in Figure 3.
Disclosure was manipulated by a simple phrase included at the end of the review. Those in the two disclosure conditions viewed a review with the statement “I received compensation for writing this review” at the end of the review. Those who were exposed to a warning prior to viewing a review with a disclosure statement were primed with the following statement as part of the survey.

“Pay for posting” is a common practice where product marketers provide free samples and payments to individuals to favorably review their products online. The Federal Trade Commission has instituted a new regulation that requires individuals who post online product reviews to disclose if they received compensation for their posting. Please answer the following questions about disclosures of payment for product reviews.

Participants then answered questions reported above concerning the frequency of pay for posting and marketers paying for product reviews as a conflict of interest and a deceptive practice. Participants in the nondisclosure condition read the statement and responded to the questions only at the conclusion of the experiment.

Consensus was manipulated by showing fictional summarized ratings from other reviewers. In the consensus condition, the distribution of the summarized ratings was more bimodal with both positive and negative reviews. Each review was summarized on the basis of stars (out of 5) and 102 fictional reviews were summarized to create the distribution of summarized ratings. However, the average rating explicitly reported to the participants was 4 for both conditions. This was done to avoid possible confounds by mixing the average rating and the volume of reviews [see 21]. The summarized ratings viewed in the consensus and disagreement conditions are displayed in Figures 5 and 6.

3.2.1. Dependent variables: credibility and helpfulness To gauge the influence of the product reviews, the participants filled out a series of survey items regarding credibility and helpfulness. The items for credibility [22] were adapted from previous work. The items for helpfulness are novel to this work and were intended to represent the helpfulness scores that are commonly assigned by readers of reviews on popular online retailing sites. All of the items demonstrated reasonable reliability and were aggregated via means across items within each construct; however, the two constructs were highly correlated ($r = .70; p < .001$). The items for credibility and helpfulness and a factor analysis of the responses are presented in the Appendix (§8). As was previously mentioned, no claim is made about the relationships between the dependent variables. It is only noted that together they capture how informative and influential a product review may be. As shown in Table 1, all measures demonstrated properties permitting parametric statistical testing.
variates (MANOVA) was performed with disclosure and consensus as independent variables; and credibility and helpfulness as dependent variables. This analysis plan addressed the anticipated and demonstrated correlations between the dependent variables. The means for each of the dependent variables are listed in Table 2.

Before any analysis was performed, assumptions of multivariate normality were verified. Box’s Test of Equality of Covariance Matrices indicated that covariance matrices were different across groups, F (15, 267641.00) = 2.63, p = .001. Therefore Pillai’s Trace was used to analyze the multivariate tests [23]. Further, Levene’s Test of Error Variances indicated that there were significant differences in error variance between the conditions for credibility, F (5, 261) = 3.36, p < .01, helpfulness, F (5, 261) = 5.64, p < .001. Therefore, Tamhane’s T2 was used in post-hoc analysis of conditions [23].

There were significant main effects of disclosure on credibility, F (2, 261) = 9.65, p < .001, η² = 0.07 and helpfulness, F (2, 261) = 7.54, p = .001, η² = 0.06. There were also significant disclosure x consensus effects on credibility, F (2, 261) = 7.91, p < .001, η² = 0.06 and helpfulness, F (2, 261) = 5.54, p = .004, η² = 0.04. The main effect of consensus was not significant (helpfulness: F (1, 261) = .46, p = .50; credibility: F (1, 261) = 2.72, p = .10).

An examination of the post hoc tests comparing disclosure conditions to nondisclosure conditions indicated that disclosure of compensation significantly reduced credibility and helpfulness. For credibility, the reviews in the No Disclosure conditions were more credible than the reviews in the Disclosure, No Warning conditions (p = .002) and Disclosure, Warning conditions (p < .001). However for helpfulness, the reviews in the No Disclosure conditions were only more helpful than the reviews in the Disclosure, Warning conditions (p < .001). Reviews in the No Disclosure conditions were no more helpful than reviews in the Disclosure, Warning conditions (p = .13). Taken together these findings support H1, however the disclosure of compensation appears to influence credibility to a greater degree than helpfulness.

Hypothesis 2 posited that warning about the practice of compensating product reviewers should decrease credibility and helpfulness when participants encounter a compensation disclosure more than if they have no warning. Although results followed the direction of the hypothesis, post-hoc tests did not indicate a difference. Ratings in the Disclosure, Warning condition were not significantly lower than ratings in the Disclosure, No warning condition for credibility (p = .67) nor helpfulness (p = .17). This finding fails to support H2.

Hypothesis 3 suggested a moderating effect on compensation disclosures by consensus cues. In other words, consensus should mitigate the effect of disclosures, but disagreement should enhance them. As was previously mentioned, the interaction effect between disclosure and consensus exerted a significant effect on the credibility and helpfulness. This interaction effect is illustrated in Figure 5 for both helpfulness and credibility and the shapes of both graphs are consistent with H3.

To understand which conditions of disclosure and consensus were different from each other another MANOVA was conducted with treatment (e.g., No Disclosure; Consensus) as the independent variable and credibility and helpfulness as the dependent variables. For H3 to be significant, the difference between the No Disclosure conditions should not be significant, but there should be a significant difference between the conditions where disclosure is present. If this occurs, it means that the level of credibility and helpfulness remain relatively constant when consensus is present (even when a potential conflict of interest is suggested).

Because Levene’s Test indicated significant differences in error variables between conditions and to prevent inflated type I error, Tamhane’s T2 was again used in a post-hoc analysis. Consistent with H3, credibility (p = .69) and helpfulness (p = .78) did not vary across consensus conditions.

The helpfulness level between consensus and disagreement within the Disclosure, No Warning condition was not significantly different (p = .99). However, the difference in helpfulness levels between consensus and disagreement within the Disclosure, Warning condition approached significance (p = .07) suggesting some support for H3, but only where warnings are provided.

The credibility level between consensus and disagreement within the Disclosure, No Warning condition was also not significant (p = .99). But, the difference in credibility levels between consensus and disagreement within the Disclosure, Warning was significant (p = .04). Both credibility and helpfulness follow a similar pattern where the mitigating effect of consensus on disclosure becomes especially pronounced when warnings occur prior to disclosures.
Table 2. Means of the dependent variables for each condition

<table>
<thead>
<tr>
<th>Condition group</th>
<th>n</th>
<th>Credibility (SD)</th>
<th>Helpfulness (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Disclosure; Consensus</td>
<td>42</td>
<td>4.53 (0.87)</td>
<td>4.63 (1.31)</td>
</tr>
<tr>
<td>No Disclosure; Disagreement</td>
<td>46</td>
<td>4.89 (0.98)</td>
<td>5.08 (1.13)</td>
</tr>
<tr>
<td>Disclosure, No Warning; Consensus</td>
<td>43</td>
<td>4.00 (1.14)</td>
<td>4.60 (1.17)</td>
</tr>
<tr>
<td>Disclosure, No Warning; Disagreement</td>
<td>45</td>
<td>4.28 (1.31)</td>
<td>4.50 (1.78)</td>
</tr>
<tr>
<td>Disclosure, Warning; Consensus</td>
<td>45</td>
<td>4.40 (1.54)</td>
<td>4.51 (1.78)</td>
</tr>
<tr>
<td>Disclosure, Warning; Disagreement</td>
<td>46</td>
<td>3.47 (1.31)</td>
<td>3.44 (1.70)</td>
</tr>
</tbody>
</table>

Figure 5. Illustration of interaction effect between disclosure and consensus for credibility and helpfulness

5. Discussion

The results of the first portion of this study are not very surprising. When individuals encounter a disclosure statement as part of an online product review, they find the review less credible and helpful (H1). But, this study contributes some understanding into how this decline happens for different types of reviews which offer (and don’t offer) consensus information.

When individuals encounter a disclosure statement, the review will be less credible and helpful. The impact of this will finding will likely be felt by product reviewers. As they are forced to disclose compensation, reviewers will likely lose some influence they might have previously enjoyed (and that paying marketers might have previously expected). However, it is noted that even with compensation disclosed, most mean helpfulness and credibility ratings were above the midpoint. The only ratings below the midpoint were in the Disclosure, Warning; Disagreement condition. Therefore it cannot be stated that compensated product reviews are derogated due to disclosure. A precipitous drop in helpfulness and credibility ratings did not occur as a result of disclosure. Reviewers are simply deemed less credible.

Although the effect of warning messages created the predicted pattern in credibility and helpfulness ratings, the differences did not reach significant levels (H2). This is likely because many participants in the study were already familiar with the practice of marketers or manufacturers compensating online product reviewers for favorable reviews. Evidence for this conclusion can be seen in the responses collected from the participants themselves: they harbored neutral feelings about the benevolence of online product reviewers and suspected that reviewers received compensation for over 17% of the reviews they had read. In other words, the experiment participants did not lack interpretation for disclosures of conflict of interest. Participants seemed to understand what the disclosures meant.

When there was consensus among product reviewers, disclosure statements had a little impact on helpfulness and credibility (H3). However, when there was disagreement among reviewers and participants were warned about potential conflict of interest, credibility and helpfulness dropped. Thus, the presence of any consensus cues mitigated the effect of disclosure.

There are several implications of this finding. Perhaps most significant are the implications for online marketers. When marketers pay reviewers to promote their products and a positive outlook is shared by the
majority of online reviewers, the disclosure of compensation is unlikely to harm the paid-for product reviews. However, marketers are unlikely to pay reviewers to improve the online product reputation of a product that is already favorably received. Instead, marketers may be tempted compensate reviewers when their products are not favorably received (the product receives mixed reviews). When marketers attempt this and the compensation is disclosed, potential buyers will likely heavily discount the compensated review. Further, the compensated product review may generate some backlash or be taken as a negative cue to product quality but the potential for these effects are currently unknown.

Another implication of this finding can be found in the design decisions that online vendors must make in creating online review forums. Compensating product reviewers undermines one of the valued aspects of the online shopping experience and represents a threat to online vendors (especially if the online vendor is interested in supporting communities around groups of products). This threat of disclosure of compensated product reviews can be largely mitigated by large numbers of reviewers reaching consensus about the quality of a product. Thus anything that the online vendors can do to solicit, collect, and support the process of online product reviewing will contribute to mitigating the threat of compensated product reviews. However, in considering this implication it must be noted that online vendors may be tempted to sponsor (i.e. pay for) online reviewers' participation. The practice of compensating product reviewers to contribute reviews will likely have a counterproductive effect if the compensation is disclosed.

Finally, this finding implies the potential for consensus information to have primacy over disclosure of compensation for helpfulness and credibility. Thus the opinion of many may outweigh the opinion of one who may harbor a conflict of interest. It should be noted that here, individuals appear to be making an assumption that all of the other product reviews that make up the summary score do not contain disclosure statements and are therefore objective. Although it would require significant effort, marketers may be tempted to exploit this assumption by crowding aggregated reviews with favorable, compensated reviews. This phenomenon has occurred in the past [6] and may not be noticed by an individual unless she uncovers numerous, compensated product reviews. Such a practice would almost certainly be noted by the review aggregators (e.g., Amazon) and the responsibility for ensuring this does not occur may fall on them (especially if the number of reviews is large).

6. Limitations and future steps

As part of the experimental stimulus, all of the disclosure statements were placed at the bottom of the review so they would be noticed and considered. This operationalization of disclosure does not consider the myriad ways that disclosure may be accomplished. For example, disclosure may occur in the text of the review or may be made on a page linked to the review. More research needs to be performed on the format of disclosure.

Further, this study drew from students to create its sample. This limits the application of these findings to other segments of the population. This may be important in interpreting the lack of support of H2 and the implications for H3. The student sample appeared to be very aware that some online reviewers receive compensation for their reviews. This may not be true of other segments of the population (e.g., older online shoppers). Therefore, conflict of interest warnings may be more influential on non-student perceptions about product reviews. Additionally, the students may place a premium on the opinions of others when considering the effects of product reviews. In other words, the effect of social validation may be stronger for students than for other online shoppers.

Finally, online product reviews are issued by numerous sources online. This treatment has been limited to anonymous reviewers who contribute reviews to vendor websites. There are others (e.g., blogs, traditional media outlets) that also provide product reviews. Blogs and other review sources are maintained by individuals whose identity is constant and (for the most part) known. Therefore, credibility and helpfulness attributions of reviews from these sources may occur via a much different mechanism where the tradeoff between reputation and compensation disclosure will have to be weighed. How potential conflict of interest disclosures impact reviewers with known and recognized reputations remains an open question worthy of future inquiry.

7. Conclusion

This work seeks to address a gap in current research concerning the effects of disclosure statements, consensus, and conflict of interest warnings on review credibility and helpfulness. This research should inform other researchers who are interested in the effects of disclosure statements, marketers who attempt to manage the online reputation of their products, policy makers who wish to ensure consumer confidence, and individuals who are interested in how online reviews impact their purchase decisions.
8. Appendix

8.1. Product review

The text of the product review was held constant for all conditions of the experiment. The review was adapted from an actual online product review [24]. The text of the review is below:

The DSC-W170 is a smaller, lighter camera than my last camera. It also offers twice the megapixels, a wide angle lens, 5x zoom lens, bigger/better LCD and a rechargeable Li-Ion battery. The DSC-W170 is very well built, unlike some of the cheaper plastic cameras on the market. For example, Sony used a metal tripod mount instead of a plastic one. Sony used a high quality Carl Zeiss lens on this camera, much like other models in the Cyber-Shot series. However, it's a wide angle lens, so you can fit more people in a shot without backing up. On the back, you will find a beautiful 2.7" LCD, displaying an impressive 230k pixels. Features are where the W170 really shines. It features Sony's "Super SteadyShot" optical image stabilization, which really helps reduce unwanted camera shake. The face detection works very well, as does the smile shutter. A new Sony feature this year is child and adult priority, which amazingly works. "Happy Faces" is an in-camera editing feature that can make a person look like they are smiling, which works to an extent. Battery life is rated at ~400 shots, which is accurate and plenty long enough for most people. Noise is not usually a problem if you don't go above ISO 800. It also has an "Easy" mode that takes away the more advanced/confusing functions. Some of the other reviewers mentioned poor image quality, which is not true. I wouldn't expect a compact point & shoot to get better results than a chunky DSLR. Image quality is excellent and most users will be very happy with the images this camera can take. Overall, the Sony DSC-W170 is a high quality camera that should satisfy anyone looking for a compact point & shoot camera. I hope this helps!

8.2. Survey items

Following traditional definitions of credibility, [e.g., 15], credibility has two components: trustworthiness and expertise. Credibility items were measured on a Likert scale with anchors of Strongly Disagree and Strongly Agree.

This reviewer is likely to be honest.
This reviewer is likely to be reliable.
This reviewer is likely to be knowledgeable.

Helpfulness was measured using semantic differentials. The end points for each item were noted in the item and each item contained a midpoint labeled neutral.

This review is: Helpful/Unhelpful
This review is: Beneficial/Not beneficial
This review is: Valuable/Not valuable

To ensure that credibility and helpfulness were, in fact, capturing distinct attitudes, a factor analysis was performed. The factor analysis used principle components analysis and a Verimax rotation. Because two components were expected, all items were forced to load on 2 factors. The rotated solution with factor loadings is shown in Table 3. The final solution captured 71.7 percent of the variance. This factor analysis taken with the reliabilities reported in Table 1 (alphas) provide support for the use of credibility and helpfulness as separate and distinct constructs.

<table>
<thead>
<tr>
<th>Component</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cred_Honest</td>
<td>0.837</td>
<td>0.093</td>
</tr>
<tr>
<td>Cred_Reliable</td>
<td>0.86</td>
<td>0.154</td>
</tr>
<tr>
<td>Cred_Cred</td>
<td>0.896</td>
<td>0.091</td>
</tr>
<tr>
<td>Cred_Expert</td>
<td>0.681</td>
<td>-0.04</td>
</tr>
<tr>
<td>Cred_Know</td>
<td>0.748</td>
<td>-0.043</td>
</tr>
<tr>
<td>Help_Help</td>
<td>0.079</td>
<td>0.906</td>
</tr>
<tr>
<td>Help_Bene</td>
<td>0.025</td>
<td>0.893</td>
</tr>
<tr>
<td>Help_Value</td>
<td>0.036</td>
<td>0.891</td>
</tr>
</tbody>
</table>

Table 3. Rotated factor solution of credibility and helpfulness items

9. References


Amazon.com, "Sony Cybershot DSCW170/B 10.1MP Digital Camera with 5x Optical Zoom with Super Steady Shot (Black)," http://www.amazon.com/Sony-Cybershot-DSCW170-Digital-


