



## Tried and tested: The impact of online hotel reviews on consumer consideration

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### ABSTRACT

Many consumers consult online reviews before making (online) travel arrangements. Yet, little is known about the impact of these reviews on consumer decision making. This research applies consideration set theory to model the impact of online hotel reviews on consumer choice. An experimental study ( $N = 168$ ) that includes review valence (positive vs. negative reviews), hotel familiarity (well-known vs. lesser-known hotels), and reviewer expertise (expert vs. non-expert reviewers) as independent factors shows that on average, exposure to online reviews enhances hotel consideration in consumers. This is because positive as well as negative reviews increase consumer awareness of hotels, whereas positive reviews, in addition, improve attitudes toward hotels. These effects are stronger for lesser-known hotels. Reviewer expertise has only a minor – positive – influence on review impact.

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### 1. Introduction

In answer to increasing consumer demand for unbiased travel information (D'Ambra & Wilson, 2004; iMediaConnection, 2004), so-called tourism eMediaries (Buhalis & Licata, 2002) provide online reviews of hotels in popular travel destinations (e.g., [www.tripadvisor.com](http://www.tripadvisor.com)). Reports indicate that each year hundreds of millions of potential hotel visitors consult such review sites (Tripadvisor.com, 2006). Of these visitors, 84% have their hotel choices affected by what they see ([Travelindustrywire.com](http://Travelindustrywire.com), 2007). In total, online reviews influence over \$10 billion a year in online travel purchases ([Etcnewmedia.com](http://Etcnewmedia.com), 2007).

Several recent studies explore the issue of online reviews, or *electronic word-of-mouth*, focusing mainly on matters such as motivations of, and social dynamics between, users and contributors of review sites (Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004). These studies, however, do not investigate online reviews' impact on consumer decision making, i.e., to what extent exposure to online reviews affects consumers' attitudes and purchase decisions (Chevalier & Mayzlin, 2006; Sen & Lerman, 2007).

In the current study, we make a start in systematically exploring the effects of online hotel reviews on consumer choice. We do so by providing an empirical test of three key elements in online reviews: review valence, reviewer expertise, and consumer familiarity with the reviewed object, in this case, familiarity with a hotel brand.

First, whereas at the intuitive level the role of review valence appears straightforward – we would expect positive reviews to elicit more positive responses than negative reviews – research on the effects of media coverage on corporate image (Meijer & Kleinnijenhuis, 2006) suggests that negative reviews sometimes elicit positive responses in audiences. Second, the role of online reviewer expertise is unclear: Some electronic word-of-mouth studies show source expertise to amplify message impact, whereas others show respondents to rely more on non-expert sources (Senecal & Nantel, 2004). Finally, brand familiarity effects might play an important moderating role: Familiar hotel brands could be more resilient to review effects than unfamiliar brands because the former have stronger roots in consumer memory.

The current paper explores these issues by presenting an experimental study on the impact of online hotel reviews on consumer decision making. It takes the consideration set model of consumer choice (Roberts & Lattin, 1991) as a theoretical point of departure. The study uses advanced online implicit measurement techniques; implicit measures are less vulnerable to demand characteristics than explicit measures, most notably because measurement takes place outside of consumer awareness (Banaji, 2001).

### 2. Background

A recent study on the impact of New York Times book reviews on book sales (Sorensen & Rasmussen, 2004) established – unsurprisingly – that positive reviews had a more positive impact on book sales than negative reviews. But it also – more surprisingly –

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found that negative reviews had a positive impact on book sales. The authors explained the latter finding by referring to reviews' "informative," as opposed to persuasive, component. This component, informing readers of a book's existence and characteristics, might entice readers to purchase a book, even when the persuasive component of the review advises the reader not to do so.

Marketing theorists would relate this informative component of a review to consumers' product or brand awareness (Keller, 1993). In the consideration set model of consumer decision making (Roberts & Lattin, 1991), awareness is a key variable. The model describes consumer choice as a multi-stage process in which consumers construct increasingly small mental sets of choice options. At the first of these stages, consumers narrow down the *universal set*, i.e., the set of all possible choice options, to the *awareness set*, the set of choice options that they can recall under given circumstances. At this stage, options with a higher salience – for example due to intensive advertising – have a better chance of being recalled and thus making it to the awareness set (Alba & Chattopadhyay, 1986).<sup>1</sup> At the second stage, consumers narrow down the awareness set to the *consideration set*, the small set of options that they are willing to consider. At this stage, consumer attitude toward the choice options is pivotal (Priester, Nayakankuppam, Fleming, & Godek, 2004). At the final stage, consumers narrow down the consideration set to a very small *choice set*, or to a single item of choice. At this stage, factors that might lay outside of the marketers influence, such as product experience (Hoeffler & Ariely, 1999) and the availability of retrieval cues (Nedungadi, 1990), play a decisive role.

### 2.1. Hotel awareness

If reviews improve hotel (brand) salience in consumers, then reviews should also improve the probability of hotels' inclusion in consumers' awareness sets (Alba & Chattopadhyay, 1986). Well-known hotels are, almost by definition, more salient to the average consumer than lesser-known hotels – examples of hotels that might be top-of-mind to consumers are Holiday Inn (Cobb-Walgreen, Ruble, & Donthu, 1995), Golden Tulip, or Hilton. For such hotels, the probability of inclusion in consumers' awareness sets is strong; exposure to reviews will hardly affect it. The informative effect of online hotel reviews will thus be stronger for lesser-known hotels than for well-known hotels. Based on this argument, we hypothesize,

**H1.** Exposure to online hotel reviews increases hotel awareness.

**H2.** Exposure to online hotel reviews increases hotel awareness more for lesser-known hotels than for well-known hotels.

### 2.2. Hotel attitude

Traditionally, communication research has accredited free publicity – e.g., news paper articles, editorial comments, weblogs, and reviews – with a limited persuasive impact (McCombs & Shaw, 1972). Recent studies, however, did find proof for free publicity's influence on receiver attitudes. This influence is referred to as the "second level of agenda setting" (Scheufele, 1999). At this level, free publicity does not only affect which issues or actors are salient in receivers (the first level of agenda setting), but also which issue or actor attributes are salient. Exposure to an online hotel review might

thus, e.g., prime the "comfort" attribute of hotels, and, in turn, improve consumer attitudes toward a hotel scoring high on comfort.

If a hotel brand is more salient in consumers, hotel brand attributes will in all likelihood be more salient as well. In such cases, exposure to a review might improve attribute salience only to a limited extent. As a result, reviews about well-known hotels will not have very strong persuasive effects. This conjecture is in agreement with prior research in persuasive communication showing that well-established attitudes are resilient to change (Ahluwalia, Burnkrant, & Unnava, 2000; Pomerantz, Chaiken, & Tordesillas, 1995). We therefore hypothesize that,

**H3.** Exposure to online hotel reviews affects hotel attitude: Positive reviews yield positive attitude changes, whereas negative reviews yield negative attitude changes.

**H4.** Exposure to online hotel reviews affects hotel attitude more for lesser-known hotels than for well-known hotels.

Traditional media normally use professional experts to review products or services. Prior research established that, in general, experts are more persuasive than non-experts (Petty, Cacioppo, & Goldman, 1981). On the Internet (e.g., [www.epinions.com](http://www.epinions.com)), many reviews are consumer-generated. Electronic word-of-mouth research on the impact of reviewer expertise has shown varied results. Earlier studies concluded that consumers ascribe more value to recommendations by fellow consumers than to recommendations by professional reviewers. According to these studies, consumers perceive fellow consumers' opinions to be less biased. They also find fellow consumers' experiences easier to relate to (Bickart & Schindler, 2001). More recent studies, in contrast, concluded that expert recommendations influence consumers more. Increasing experience with online reviews might have led consumers to perceive experts as better informed, and more reliable (Senecal & Nantel, 2004). Based on this latter notion we expect to find that,

**H5.** Exposure to expert online hotel reviews affects attitude more than exposure to non-expert online reviews.

### 2.3. Hotel consideration

According to the consideration set framework, consumers will consider hotels that they are aware of and toward which they have relatively positive attitudes. In other words, hotel awareness and hotel attitude are complementary predictors of hotel consideration (Nedungadi, 1990). By H1, online hotel reviews increase hotel awareness. By the consideration set model, in turn, increasing hotel awareness will increase hotel consideration (Roberts & Lattin, 1991). Therefore,

**H6.** Exposure to online hotel reviews increases hotel consideration.

Whereas all reviews might improve hotel awareness, only positive reviews will improve hotel attitude. A positive impact on hotel awareness and on hotel attitude should yield a strong positive impact on hotel consideration (Priester et al., 2004). In contrast, negative reviews presumably have a positive effect on hotel awareness and a negative effect on hotel attitude; when occurring together, both effects might balance each other out. Therefore,

**H7.** Exposure to positive online hotel reviews improves hotel consideration, whereas exposure to negative reviews yields no change in consideration.

By Hypotheses 2 and 4, hotel familiarity has an impeding effect on both the awareness enhancing and the persuasive impact of online hotel reviews. Therefore, hotel familiarity will impede hotel consideration change as well.

**H8.** Exposure to online hotel reviews affects consideration more for lesser-known hotels than for well-known hotels.

<sup>1</sup> Some authors (Shocker, Ben-Akiva, Boccara, & Nedungadi, 1991) assume the awareness set to be less dependent of salience, that is, to constitute a set of *recognized* instead of *recalled* choice options. By and large, these authors consider what we defined as the awareness set in the current paper to be the consideration set, and what we defined as the consideration set to be the choice set.

Finally, by H5, expert reviews have a stronger persuasive effect than non-expert reviews. Therefore,

**H9.** Exposure to expert online hotel reviews affects consideration more than exposure to non-expert online reviews.

### 3. Study

An experimental study was conducted to assess the moderating influence of review valence, hotel familiarity, and reviewer expertise on the within-subject effect of online hotel reviews on consumer awareness, attitudes, and consideration of hotels.

#### 3.1. Method

Participants from different parts of the Netherlands were recruited by e-mail to participate in an online study; 168 respondents completed the entire experiment. Mean age was 31 ( $SD = 11$  years), 80.0% had a college degree, 43.5% were men, 56.5% were women. These demographics correspond well with the young professionals most strongly associated with the use of online travel reviews (Etcnewmedia.com, 2007). Respondents were randomly assigned to one of eight groups in a 2 (review valence: positive vs. negative review)  $\times$  2 (hotel familiarity: well-known vs. lesser-known hotels)  $\times$  2 (reviewer expertise: expert vs. non-expert reviewer)  $\times$  2 (review exposure: pre- vs. post-review) mixed factorial design.

#### 3.2. Procedure

Participants received an e-mail which contained a link to the experiment website. By following this link, they were randomly assigned to one of eight experimental conditions. First, participants reported gender, age, education, and place of residence. Next they advanced to three word reaction tasks measuring, respectively, pre-stimulus hotel awareness, consideration, and attitude. In the first task, respondents were asked to classify 25 hotel names as “known” vs. “unknown” as fast as possible. In most applications of the consideration set model, product awareness has a dichotomous operational definition – products are either known or not known to a consumer (Priester et al., 2004). The current study, in contrast, regards product salience as an important factor in awareness. It therefore assesses consumers’ response latencies, in such a way that (1) a fast positive reaction indicates high awareness; (2) a fast negative reaction indicates low awareness; and (3) a slow reaction – signifying ambiguity regarding hotel awareness – indicates moderate awareness. In addition to being theoretically useful, the use of response latencies makes the assessment of the dependent measures more implicit (Fazio & Olson, 2003); it has been shown that implicit measurements avoid social desirability constraints, and can reveal cognitive mechanisms that lie outside conscious awareness and control (Banaji, 2001). The order in which the hotel names appeared on screen was randomized. To increase reliability, the name of each hotel appeared three or more times; mean reaction scores were computed. Subsequently, the second and third word reaction tasks were conducted and processed similarly. In the hotel consideration task, respondents were asked to classify hotel names as “would consider” vs. “would not consider” as fast as possible. In the hotel attitude task “good” vs. “bad” were the classification categories.

After finishing the three tasks, the respondents were shown one of eight experimental reviews. Participants thus were exposed to a positive or a negative review, about a well-known or a lesser-known hotel, written by an expert or a non-expert. All reviews were embedded in a web page supposedly retrieved from a fictitious Dutch hotel review website. The web page mimicked pages of

established hotel review sites and contained, among others, links to other sites, a short weather report, and an advertisement banner. Review valence was manipulated by consistently replacing all evaluative statements in an original online hotel review by unequivocal positive or negative statements. Reviewer expertise was manipulated by referring to the reviewer as either “a former hotel manager and six-year veteran hotel reviewer” or “a secretary” in the short introduction accompanying each review. Name, age, and gender of the reviewer, as well as a small picture, were kept equal across conditions. Based on independent pre-test ( $N = 15$ ) that tested familiarity of 15 hotel names, Golden Tulip and Starwood<sup>2</sup> were used in the high and low hotel familiarity conditions.

After exposure the reviews, the three word reaction tasks were repeated, yielding post-stimulus measures for hotel awareness, consideration, and attitude. Respondents were then asked to rate perceived review valence (four five-point Likert scale items,  $\alpha = 0.96$ ), and perceived reviewer expertise (two five-point Likert scale items,  $r = 0.70$ ,  $p < .001$ ). Finally, respondents were thanked and debriefed.

#### 3.3. Manipulation checks

An independent samples *t*-test showed that the manipulation of review valence was successful ( $t(166) = 18.95$ ,  $p < .001$ ). Respondents exposed to a positive review perceived it as more positive ( $M = 3.94$ ,  $SD = 0.79$ ) than those exposed to a negative review ( $M = 1.68$ ,  $SD = 0.76$ ). The manipulation of reviewer expertise succeeded as well ( $t(166) = 5.07$ ,  $p < .001$ ). Respondents attributed more expertise to expert reviewers ( $M = 3.00$ ,  $SD = 0.80$ ) than to non-expert reviewers ( $M = 2.41$ ,  $SD = 0.71$ ). Hotel familiarity also was successfully manipulated ( $t(166) = 20.51$ ,  $p < .001$ ). Pre-stimulus awareness of Golden Tulip ( $M = 4.48$ ,  $SD = 0.22$ ) exceeded that of Starwood ( $M = 2.11$ ,  $SD = 1.07$ ).

#### 3.4. Main analysis

##### 3.4.1. Hotel awareness

A 2 (review valence)  $\times$  2 (hotel familiarity)  $\times$  2 (reviewer expertise)  $\times$  2 (pre/post) repeated measures ANOVA on hotel awareness revealed a positive main within-subject effect of the experimental reviews ( $F(1,159) = 16.17$ ,  $p < .001$ ). As predicted by Hypothesis 1, hotel awareness significantly increased after respondents were exposed to the reviews. As predicted by Hypothesis 2, this increase was larger for lesser-known hotels than for well-known hotels ( $F(1,159) = 7.55$ ,  $p < .01$ ). Means are displayed in Table 1. No further effects were found.

##### 3.4.2. Hotel attitude

Repeated measures ANOVA on word reaction based attitude revealed that the effects of positive and negative reviews on hotel attitude were significantly different ( $F(1,159) = 22.79$ ,  $p < .001$ ). Simple effect analyses showed that, as predicted by Hypothesis 3, positive reviews yielded a positive attitude change ( $F(1,159) = 15.04$ ,  $p < .001$ ), whereas negative reviews yielded a negative attitude change ( $F(1,159) = 8.45$ ,  $p < .005$ ). As predicted by Hypothesis 4, the repeated measures ANOVA revealed a three-way interaction: Attitudes toward lesser-known hotels reacted stronger on review valence than attitudes toward well-known hotels ( $F(1,159) = 11.60$ ,  $p < .005$ ). Simple effect analysis showed that for lesser-known hotels, the positive attitude change due to the positive reviews ( $F(1,159) = 27.82$ ,  $p < .001$ ), as well as the negative

<sup>2</sup> Although Starwood is an important actor in the hotel industry, our respondents turned out to be unfamiliar with the conglomerate brand name – in contrast to some of its sub-brands, such as Sheraton, Méridien, and Westin.

**Table 1**

Means (SDs) of hotel awareness as a function of exposure to an online review, and hotel familiarity

Condition	Awareness	
	Pre	Post
Total	3.38 (1.40) <sub>a</sub>	3.67 (1.41) <sub>b</sub>
Lesser-known hotel	2.11 (1.07) <sub>a</sub>	2.63 (1.41) <sub>b</sub>
Well-known hotel	4.48 (0.23) <sub>c</sub>	4.58 (0.43) <sub>c</sub>

Note: Means with different subscripts (in rows, for each dependent variable) differ significantly from each other ( $p < .05$ ).

attitude change due to the negative review ( $F(1,159) = 7.36, p < .01$ ) were significant, whereas for well-known hotels both were not significant ( $F < 1$ ;  $F(1,159) = 1.69$ , ns, respectively). Means are displayed in Table 2. In contrast to the prediction made in Hypothesis 5, no effects of reviewer expertise were found. No further effects were found.

#### 3.4.3. Hotel consideration

Repeated measures ANOVA on hotel consideration revealed a positive main within-subject effect of review exposure on hotel consideration. Concordant to Hypothesis 6, hotel consideration significantly increased after respondents were exposed to a review ( $F(1,159) = 6.26, p < .05$ ). Also, review valence significantly affected consideration change ( $F(1,159) = 5.19, p < .05$ ). Simple effects analysis showed that, concordant to Hypothesis 7, positive reviews had a positive impact on consideration ( $F(1,159) = 12.25, p < .005$ ), whereas negative reviews had no significant impact ( $F < 1$ ). As predicted by Hypothesis 8, consideration of well-known hotels was less susceptible to change than consideration of lesser-known hotels ( $F(1,159) = 4.09, p < .05$ ). Simple effects analysis showed that reviews about lesser-known hotels had a positive impact on consideration ( $F(1,159) = 9.41, p < .005$ ), whereas reviews about well-known hotels had no significant effect ( $F < 1$ ). Finally, in line with Hypothesis 9, reviews by experts had a significantly stronger effect on consideration than reviews by non-experts ( $F(1,159) = 3.89, p < .05$ ). Simple effects analysis showed that expert reviews had an overall positive impact on consideration ( $F(1,159) = 9.10, p < .005$ ), whereas non-expert reviews had no significant effect ( $F < 1$ ). Means are displayed in Table 3. No further effects were found.

## 4. Discussion

The current research makes clear that exposure to an online hotel review improves the average probability for consumers to consider booking a room in the reviewed hotel. This positive main effect of review exposure on hotel consideration can be explained by the fact that all reviews – positive or negative – make consumers

**Table 3**

Means (SDs) of hotel consideration as a function of exposure to an online review, review valence, reviewer expertise, and hotel familiarity

Condition	Consideration	
	Pre	Post
Total	3.44 (1.37) <sub>a</sub>	3.64 (1.36) <sub>b</sub>
Negative review	3.52 (1.34) <sub>a</sub>	3.50 (1.41) <sub>a</sub>
Positive review	3.38 (1.40) <sub>a</sub>	3.78 (1.31) <sub>b</sub>
Non-expert reviewer	3.53 (1.31) <sub>a</sub>	3.58 (1.34) <sub>a</sub>
Expert reviewer	3.34 (1.44) <sub>b</sub>	3.72 (1.39) <sub>c</sub>
Lesser-known hotel	2.42 (1.23) <sub>a</sub>	2.81 (1.44) <sub>b</sub>
Well-known hotel	4.46 (0.57) <sub>c</sub>	4.36 (0.74) <sub>c</sub>

Note: Means with different subscripts (in rows, for each dependent variable) differ significantly from each other ( $p < .05$ ).

more aware of the reviewed hotel's existence. Even though negative reviews lower consumer attitudes toward the reviewed hotels, enhanced hotel awareness compensates for this effect, yielding a near neutral net effect on consideration.

Results furthermore make clear that familiarity with a hotel makes consumers resilient to the effects of online hotel reviews. Online reviews improved hotel awareness more for lesser-known hotels than for well-known hotels. Also, the persuasive effect of online reviews was stronger in lesser-known hotels. This confirms the notion that less-established attitudes are easier to change. Consequently, the overall effect of online reviews on hotel consideration was stronger for lesser-known hotels than for well-known hotels.

The moderating role of reviewer expertise in persuasion turned out to be limited. Expert reviews did not change consumer attitudes toward hotels more than did non-expert reviews. However, reviewer expertise did have a moderating role in hotel consideration. Specifically, whereas reviews by non-experts had – on average – no significant effect on hotel consideration, reviews by experts had an overall positive effect. This last finding might be explained by the occurrence of a knowledge bias (Eagly, Wood, & Chaiken, 1978). Of all reviews, respondents found negative expert reviews to be the least persuasive – hence the overall positive effect of expert reviews. Possibly, respondents expected professional hotel reviewers to be critical of issues that are of little interest to the average traveler. Attribution processes, i.e., expectations about communicators' preoccupations and/or intrinsic motives, have shown to play a key role in consumers' valuations of online reviews (Sen & Lerman, 2007), and thus are likely to affect review impact (Vermeulen, Das, & Swager, 2008). Future research of online review impact on consumer behavior should take attribution processes into account, especially in the light of the increasing number of expert online travel reviews becoming available online (see, e.g., [www.lonelyplanet.com](http://www.lonelyplanet.com)).

#### 4.1. Theoretical implications

By showing that the impact of online hotel reviews is less clear-cut than expected at first glance, the current study contributes to our understanding of electronic word-of-mouth effects observed in markets world wide. The study's main theoretical contribution lies in demonstrating the use of the consideration set theory to model, and reason about, the impact of online reviews on consumer behavior. By pointing out the different stages at which reviews might affect consumer behavior, the theory gives a straightforward explanation for seemingly counter-intuitive review effects, such as the occurrence of positive consumer behavior after exposure to negative reviews. Consideration set theory might also provide a solid framework for future research into the many possible moderators of review impact not considered in the present research, such as product type (e.g., experience vs. search goods),

**Table 2**

Means (SDs) of hotel attitude as a function of exposure to an online review, review valence, and hotel familiarity

Condition	Attitude	
	Pre	Post
Negative review	3.74 (1.27) <sub>a</sub>	3.39 (1.46) <sub>b</sub>
Positive review	3.39 (1.36) <sub>c</sub>	3.81 (1.26) <sub>d</sub>
Lesser-known hotel		
Negative review	2.81 (1.34) <sub>a</sub>	2.28 (1.14) <sub>b</sub>
Positive review	2.40 (1.18) <sub>c</sub>	3.25 (1.44) <sub>d</sub>
Well-known hotel		
Negative review	4.46 (0.57) <sub>e</sub>	4.26 (1.03) <sub>e</sub>
Positive review	4.32 (0.68) <sub>e</sub>	4.34 (0.76) <sub>e</sub>

Note: Means with different subscripts (in rows, for each dependent variable) differ significantly from each other ( $p < .05$ ).



consumer involvement, differences in culture, gender or age, framing, writing style, source likeability, identification, anonymity, rating systems, etc.

This research is one of the first to study review effects in an experimental setting. Prior studies mostly relate prominent reviews to sales figures in a naturalistic setting (Basuroy, Chatterjee, & Ravid, 2003). Although externally valid, such research is not able to causally relate observed changes in consumers' buying behavior to exposure to specific reviews. By using controlled conditions, we, in contrast, show that changes in hotel consideration are actually due to exposure to reviews. We enhanced validity by using implicit measurement techniques, i.e., response latencies, to assess review impact on awareness and consideration. Implicit measurement strongly reduces the extent to which respondents can manipulate their answers, e.g. in reaction to their perception of the experimenter's intentions. Until recently, measuring response latencies was restricted to a laboratory setting, but nowadays they can be measured online by using relatively simple programming tools such as Macromedia Flash (e.g., <https://implicit.harvard.edu/implicit/>).

#### 4.2. Practical implications

A recent review suggests that the current proliferation and widespread use of online hotel reviews is, overall, an opportunity rather than a threat to entrepreneurs and managers in the hotel industry (Litvin, Goldsmith, & Pan, 2008). Recent industry reports indicate that hoteliers agree to this observation (Etcnewmedia.com, 2007). The current experimental study also confirms this notion. Other empirical findings more indirectly suggest that online hotel reviews might benefit hoteliers. For example, evidence shows that exposure to online product quality information reduces consumers' sensitivity to price information (Lynch & Ariely, 2000). This should lead to less intensive price competition among hotels, and, consequently, to higher margins. Other studies have shown that consumers – especially in ad hoc decision making – prefer stimulus-based over memory-based choice options (Alba, Marmorstein, & Chattopadhyay, 1992). Exposure to a hotel brand name in an online review might function as a choice stimulus, and might thus positively affect consumer preferences.

The current study provides an additional reason why, on the whole, online reviews should benefit hoteliers: It suggests that positive reviews have a positive impact on consumer behavior, whereas negative reviews have little impact. This does not mean that negative reviews are harmless. Prior studies have shown that continuous negative publicity, especially when badly managed, can be highly damaging (Dean, 2004). There is no reason to believe that in an online setting the impact of continuous negative reports will be very different. Our study does imply, however, that a single negative online review generally does not cause much harm, whereas a single positive online review can do a lot of good. Hospitality reviewers already noticed that their positive reviews have a much larger impact on consumer behavior than their negative reviews (van Dam, 2006). The present study univocally supports this observation.

#### References

- Ahluwalia, R., Burnkrant, R., & Unnava, H. (2000). Consumer response to negative publicity: the moderating role of commitment. *Journal of Marketing Research*, 37(2), 203–214.
- Alba, J., & Chattopadhyay, A. (1986). Salience Effects in Brand Recall. *Journal of Marketing Research*, 23(4), 363–369.
- Alba, J., Marmorstein, H., & Chattopadhyay, A. (1992). Transitions in preference over time: the effects of memory on message persuasiveness. *Journal of Marketing Research*, 29(4), 406–416.
- Banaji, M. (2001). Implicit attitudes can be measured. *The nature of remembering: Essays in honor of Robert G. Crowder* (pp. 117–150).
- Basuroy, S., Chatterjee, S., & Ravid, S. A. (2003). How critical are critical reviews? The box office effects of film critics, star power, and budgets. *Journal of Marketing*, 67(4), 103–117.
- Bickart, B., & Schindler, R. (2001). Internet forums as influential sources of consumer information. *Journal of Interactive Marketing*, 15(3), 31–40.
- Buhalis, D., & Licata, M. (2002). The future eTourism intermediaries. *Tourism Management*, 23(3), 207–220.
- Chevalier, J. A., & Mayzlin, D. (2006). The effect of word of mouth on sales: online book reviews. *Journal of Marketing Research*, 43(3), 345–354.
- Cobb-Walgren, C. J., Ruble, C. A., & Donthu, N. (1995). Brand equity, brand preference, and purchase intent. *Journal of Advertising*, 24(3), 25–40.
- D'Ambra, J., & Wilson, C. (2004). Use of the World Wide Web for international travel: integrating the construct of uncertainty in information seeking and the task-technology fit (TTF) model. *Journal of the American Society for Information Science and Technology*, 55(8), 731–742.
- van Dam, J. (2006, April 22). Bij een goed cijfer is het effect groot. *Het Parool*.
- Dean, D. (2004). Consumer reaction to negative publicity: effects of corporate reputation, response, and responsibility for a crisis event. *Journal of Business Communication*, 41(2), 192–211.
- Eagly, A. H., Wood, W., & Chaiken, S. (1978). Causal inferences about communicators and their effect on opinion change. *Journal of Personality and Social Psychology*, 36(4), 424–435.
- Etcnewmedia.com. (2007). New media review – from the European travel commission: online travel market. <<http://www.etcnewmedia.com/review/default.asp?SectionID=11&CountryID=53>>. Accessed 12.10.07.
- Fazio, R., & Olson, M. (2003). Implicit measures in social cognition research: their meaning and use. *Annual Review of Psychology* 297–328.
- Hennig-Thurau, T., Gwinner, K., Walsh, G., & Gremler, D. (2004). Electronic word-of-mouth via consumer-opinion platforms: what motivates consumers to articulate themselves on the Internet? *Journal of Interactive Marketing*, 18(1), 38–52.
- Hoeffler, S., & Ariely, D. (1999). Constructing stable preferences: a look into dimensions of experience and their impact on preference stability. *Journal of Consumer Psychology*, 8(2), 113–139.
- iMediaConnection. (August 19, 2004). Online travel bug: more than 82 percent of consumers in study make travel arrangements online. Accessed 05.12.06. <<http://www.imediaconnection.com/content/4048.asp>>.
- Keller, K. L. (1993). Conceptualizing, measuring and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1–22.
- Litvin, S. W., Goldsmith, R. E., & Pan, B. (2008). Electronic word-of-mouth in hospitality and tourism management. *Tourism Management*, 29(3), 458–468.
- Lynch, J., Jr., & Ariely, D. (2000). Wine online: search costs affect competition on price, quality, and distribution. *Marketing Science*, 19(1), 83–103.
- McCombs, M., & Shaw, D. (1972). The agenda-setting function of mass media. *The Public Opinion Quarterly*, 36(2), 176–187.
- Meijer, M., & Kleijnijenhuis, J. (2006). Issue news and corporate reputation: applying the theories of agenda setting and issue ownership in the field of business communication. *Journal of Communication*, 56(3), 543–559.
- Nedungadi, P. (1990). Recall and consumer consideration sets: influencing choice without altering brand evaluations. *Journal of Consumer Research*, 17(3), 263–276.
- Petty, R., Cacioppo, J., & Goldman, R. (1981). Personal involvement as a determinant of argument-based persuasion. *Journal of Personality and Social Psychology*, 41(5), 847–855.
- Pomerantz, E., Chaiken, S., & Tordesillas, R. (1995). Attitude strength and resistance processes. *Journal of Personality and Social Psychology*, 69(3), 408–419.
- Priester, J., Nayakankuppam, D., Fleming, M., & Godek, J. (2004). The ASC model: the influence of attitudes and attitude strength on consideration and choice. *Journal of Consumer Research*, 30(4), 574–587.
- Roberts, J., & Lattin, J. (1991). Development and testing of a model of consideration set composition. *Journal of Marketing Research*, 28(4), 429–440.
- Scheufele, D. (1999). Framing as a theory of media effects. *Journal of Communication*, 49(1), 103–122.
- Sen, S., & Lerman, D. (2007). Why are you telling me this? An examination into negative consumer reviews on the Web. *Journal of Interactive Marketing*, 21(4), 76–94.
- Senecal, S., & Nantel, J. (2004). The influence of online product recommendations on consumers' online choices. *Journal of Retailing*, 80(2), 159–169.
- Shocker, A., Ben-Akiva, M., Boccara, B., & Nedungadi, P. (1991). Consideration set influences on consumer decision-making and choice: Issues, models, and suggestions. *Marketing Letters*, 2(3), 181–197.
- Sorensen, A., & Rasmussen, S. (2004). Is any publicity good publicity? A note on the impact of book reviews. Working paper. Stanford University.
- Travelindustrywire.com. (2007). Travel reviews – consumers are changing your brand and reputation online. <<http://www.travelindustrywire.com/article29359.html>>. Accessed 12.10.07.
- Tripadvisor.com. (2006). Fact sheet. <<http://www.tripadvisor.com/pages/factsheet.html>>. Accessed 5.12.06.
- Vermeulen, I., Das, E., & Swager, M. (2008). Strong medicine or bitter pill? The impact of online drug reviews on drug purchase. In F. Costa Pereira, J. Verissimo, & P. Neijens (Eds.), *New trends in advertising research*. Lisbon: Edição Silabo.