Effects of eWOM valence: Examining consumer choice using evaluations of teaching

Katherine B. Hartman
Ohio University

James B. Hunt
University of North Carolina Wilmington

Carla Y. Childers
Ohio University

ABSTRACT

The escalating prevalence of electronic communication is changing the way consumers search for information, evaluate alternatives, and make choices. This study contributes to existing literature by investigating the effects of eWOM valence using the context of professor and course evaluations available online. Using an online experimental research design with undergraduate students, the study suggests variations in eWOM valence have differing effects on attitudes, behavioral intentions, the perceived value of reviews, and the perceived influence of reviews on decisions. Specifically, the results suggest that while positive-only eWOM evaluations have strong positive effects on changing initial attitudes and behavioral intentions, and negative-only evaluations have negative effects, both are similar with regards to perceived information value and the perceived influence of reviews on decisions. However, the results also suggest that eWOM communications with mixed reviews have limited information value and influence on consumer decisions. This study highlights the benefits and limitations of eWOM and provides suggestions for managerial practice.

Keywords: consumer decision-making, consumer reviews, electronic word-of-mouth (eWOM) communications, student evaluations of teaching, experiment

Given the increasing number of consumers engaged in electronic word-of-mouth (eWOM) communication, investigating the workings and efficacy of eWOM has become a prime research topic. Numerous studies demonstrate that consumers' purchase intentions and behaviors are significantly influenced by online recommendations (e.g., Chang & Chin, 2010; Lin et al., 2009; Park & Lee, 2009; Senecal & Nantel, 2004; Vimaladevi & Dhanabkaym, 2012; Yali & Bayram, 2012). The role of eWOM communication in the consumer decision making process has become more complex, partly due to the sheer volume of available online information, and it is common to find both positive and negative evaluations simultaneously.

The literature on the positive /attractive versus negative /aversive (i.e., valence) nature of online recommendations is limited, and recent studies have found contradictory results. On the one hand, Park and Lee (2009) examined how the information direction (positive versus negative) of a message contributes to the influence of information on purchase decisions (i.e., the eWOM effect) and found that the eWOM effect is greater for negative eWOM than for positive eWOM. On the other hand, East, Hammond, and Lomax (2008) found the opposite effect, with positively directed messages having a greater impact than negative recommendations. In light of such conflicting research results, Cheung et al. (2009) have called for further examination of positively vs. negatively framed reviews relating to the perceived valence of an eWOM message.

The field of student perceptions of teaching and course recommendations represents an appropriate and fertile area in which to explore the role of eWOM in consumer decision making. Education is a common, high involvement service experience for all students, and with the increased availability of online recommendation and evaluation information, students rely heavily on opinions of other students while making their course and professor choices. For example, Brown, Baillie, and Fraser (2009) found that 71% of college students use RateMyProfessors.com (RMP) to select among professors. As examples of eWOM, RMP and similar websites like RateYourProf.com and myEdu.com represent a voluntary effort of users to share teaching information anonymously with others.

The purpose of this study is to investigate the effects of eWOM valence using the context of professor and course evaluations available online. Although the experiment conducted in the study centers on students' perceptions of online recommendations in a professor /course decision making process, the study more generally contributes to the knowledge of marketers by providing insights into consumers' attitudes, behaviors, and consumer choice patterns that may come into play for other service or product decisions involving eWOM.

LITERATURE REVIEW & HYPOTHESES

Word of mouth (WOM) represents interpersonal communication about products and services between consumers. Research has established that WOM is one of the most influential sources of marketplace information for consumers because consumers generally trust comments made by peers more than they trust comments made by marketers (e.g. Bickart & Schindler, 2001; Bone, 1995; Sen & Lerman, 2007). Researchers have also found that WOM influences judgment of products (e.g. Bone, 1995; Herr, Kardes, & Kim, 1991; Laczniak, DeCarlo, & Ramaswami, 2001).

Course and professor online reviews by peers, like RMP, are a variation on traditional WOM known as electronic word-of-mouth communications (eWOM). eWOM connects diverse individual consumers and extends the WOM network from one's immediate contacts to the entire Internet world (Cheung et al., 2009). eWOM differs from traditional WOM because

eWOM tends to include positive and negative information, is more voluminous in quantity, and consists of multiple sources of information readily available and organized for consumers (Chatterjee, 2001). In addition, eWOM often occurs between people who have little or no prior relationship with each other and can be provided anonymously (Dellarocas, 2003). Product review websites (e.g. consumerreview.com), retailers' websites (e.g. amazon.com), professor evaluation websites (e.g. RateMyProfessors.com), brand websites, discussion forums, and messages boards on social networking websites (e.g. Facebook, MySpace) are all examples of eWOM communications. Research suggests that consumers use eWOM communications to reduce the risks associated with product or service purchase (Hennig-Thurau & Walsh, 2003).

In general, communication theory posits that eWOM reviewers can function as both informants and recommenders because they may provide user-oriented product information as well as recommendations by previous consumers (Park, Lee, & Han, 2007). As an information-provider, eWOM communications may be perceived as more credible, more consumer-oriented, and more subjective than seller-created reviews (Park, Lee, & Han, 2007). As a recommender, the content of the review contains direct suggestions to potential consumers. The inform/recommend function can play a powerful role as students undergo the process of choosing courses and instructors. For example, using two experiments, Edwards et al. (2007) established a causal link between information posted on RMP, students' subsequent evaluations of instructors, and, presumably, students' decisions about which instructors to take. Specifically, students who received positive eWOM about instructors rated instructors as more credible and attractive as compared with students who received negative eWOM or none at all.

When using online instructor rating systems, raters can express almost any opinion they want including those typically and not typically captured by traditional student evaluations of teaching (SET). Ratings and comments may represent deliberate attempts to express complaints or compliments about the professor/course that are designed to be shared with others permanently and publicly. On the one hand, comments may be negatively valenced to warn others or to damage the reputation of the professor as a result of dissatisfaction (Huefner et al., 2002). On the other hand, ratings and comments may be positively valenced to encourage others or benefit the reputation of the professor as a result of satisfaction (Huefner et al., 2002). It should be noted that Timmerman (2008) and Hartman and Hunt (In Press), using rating means and comment level data respectively, found online RMP reviews were not dominated by complaints and griping.

Attitude and Behavioral Intentions toward the Course

Over a decade ago, Chatterjee (2001) reported that online reviews had significant influence on purchase intentions of products and retailers. Clemons, Gao and Hitt (2006) found that strongly positive ratings can positively influence the growth of product sales. Xia and Bechwati (2008) studied the impact of online reviews on consumers' choice using the concept of cognitive personalization and concluded that online reviews do indeed influence consumers' purchase intentions. Lee, Park, and Han (2008) found that consumers conform to online consumer reviews and their attitudes become unfavorable as the proportion of negative online consumer reviews increases. Lin et al. (2009) found evidence from a randomized experiment that expert recommendation has positive impacts on consumers' purchase intentions. Chang and Chin (2010) noted that recommendations are positively related to intentions to purchase online (scenario about buying a notebook computer) and directly affect consumers' choices.

Furthermore, they found the effect of WOM on intentions to purchase online is greater than that of other kinds of recommendations (e.g., advertising), and note that for online marketers, consumer reviews and feedback are extremely important. Finally, both Vimaladevi and Dhanabkaym (2012) and Yali and Bayram (2012) reported that consumer reviews have a causal impact on consumer purchasing behavior.

Given the aforementioned outcomes, it is not surprising that similar results have been found in the education setting. As previously mentioned, Edwards et al. (2007) established a causal link between information posted on RMP and students' decisions about which instructor to take. Students who received positive eWOM about instructors rated instructors as more credible and attractive as compared with students who received negative eWOM or none at all. In the present study, we present an experiment focusing on students' perceptions of online recommendations in the professor / course selection process. As such:

H1. Respondents' (a) attitudes toward the course, (b) intentions to take the course, and (c) intentions to recommend the course to others will be significantly lower for negative reviews as compared to mixed reviews and positive reviews.

Confidence in Decisions

Market analysis firm Cone Inc., through their Cone Online Influence Trend Tracker and survey data (2011), find the influence of the internet and online reviews on consumers' purchase decisions to be stronger than ever. Cone found that 89% of consumers perceive online sources of product and service reviews to be trustworthy, and fully 80% of consumers have changed their minds about a purchase based solely on negative online information. Cone notes that positive product reviews have a strong influence, with 87% of consumers stating that a favorable review has confirmed their decision to go through with a purchase. The implication is that positive reviews not only result in positive attitudes about the product, but also build consumers' confidence in their purchase decision.

This is consistent with academic research that suggests consumers use eWOM communications to reduce the risks associated with product or service purchase (Hennig-Thurau & Walsh, 2003). Gershoff, Mukherjee, and Mukhopadhyay (2003) found that recommendation sources could help build consumers' trust in specific products and, if recommendation sources aid effective decision-making in the purchase process, the consumer will be more likely to trust the recommendation. Lin et al. (2009) found evidence from a randomized experiment using a high involvement product (notebook computer) and a low involvement product (shampoo) suggesting that expert recommendation and word-of-mouth have a positive impact on consumers' perceived trust and purchase intentions.

It is important to remember that online ratings, reviews, and recommendations exist to benefit the customer and help them make informed purchasing decisions.   A study by Equity Marketing Solutions (2013) notes specifically that positive peer reviews increase confidence and help guide the consumer decision process. As such:

H2. Respondents' confidence in course selection will be significantly higher for positive reviews as compared to negative reviews and mixed reviews.

Value of Reviews and eWOM Effect

Previous research has examined consumer perceptions of reviews including (1) the perceived value of the review, which refers to the perceived significance of the information learned (e.g., Kim & Gupta, 2012) and (2) the eWOM effect, which refers to the self-reported, direct influence of information on purchase decisions (e.g., Park & Lee, 2009). On the one hand, the impression management literature suggests negative information may be perceived to be more helpful than positive information (e.g., Skowronki & Calston, 1987). For example, Park and Lee (2009) found that the eWOM effect is greater for negative eWOM as compared to positive eWOM. On the other hand, studies have also found the opposite effect within the context of eWOM. For instance, East, Hammond, and Lomax (2008) found positive messages had a greater impact on outcomes than negative messages. One plausible explanation may be variance in information intensity (Floh, Koller, & Zauner, 2012), which suggests that stronger stimuli in either direction will produce stronger responses. By contrast, less intense, mixed (positive and negative) stimuli will produce weaker responses (Floh, Koller, & Zauner, 2012).

Interestingly, previous research has also suggested that two-sided messages in advertising may be perceived as more helpful and credible than one-sided messages (Mudambi & Schuff, 2010). Findings have indicated that negative comments in a set of eWOM messages may be beneficial (Doh & Hwang, 2009) because the inclusion of some negative information may increase the perceived credibility of the source. However, recent research has indicated that mixed (positive and negative) reviews may be perceived as less valuable than positive or negative reviews (Edwards & Edwards, 2012). In an experimental study of mixed reviews about students' perceptions of instructors, Edwards and Edwards (2012) argue that mixed reviews do not provide the information necessary to make a judgment using simple heuristic information processing (e.g., unanimous peer opinions can be trusted). Instead, students faced with conflicting appraisals of an instructor or course will likely conclude that they do not have enough information to make an informed judgment (Edwards & Edwards, 2012). Therefore, the informative value of the reviews and the eWOM effect of the set of reviews will decrease when conflicting information is provided. As such:

H3. Respondents' (a) perceived value of the reviews and (b) effect of word-of-mouth will be significantly lower for mixed reviews as compared to positive reviews and negative reviews**.**

METHODOLOGY

The study was a completely randomized between-subjects design with pre-post measures. Subjects were obtained using a non-probability sampling method. All subjects were undergraduate students enrolled at a public university in the mid-west. Student researchers enrolled in a research course asked subjects to participate in the experience through a standardized e-mail invitation. The invitation provided a brief background on the experiment, a request for participation, an incentive for participation, instructions, a link to the survey, and a brief statement that thanked them for their participation.

Stimuli and Procedures

The study was designed as an online experiment using *Qualtrics* survey software. The study design was a 3x3x2 between-subjects scenario which included eighteen treatment

scenarios that varied review valence (negative, positive, or mixed), review content (professor, course, or both), and review source (anonymous ratings from RateMyProfessor.com or summaries of official university-administered ratings posted online by a new, hypothetical website called KnowYourProfessors.com).   Review valence was manipulated in order to test the hypotheses while review content and review source were manipulated in order to test for potential demand artifacts (Sawyer, 1975). Because prior research suggests online reviews of professors may include either comments about professors, about courses, or both (Hartman & Hunt, In Press), varying review content was important to test for potential bias associated with lack of experimental realism. Because prior research suggests the vast majority of students use RMP to select among professors (Brown, Baillie, & Fraser, 2009), varying review source was important to test for potential positive / negative bias derived from prior brand experience.

After securing informed consent, respondents were presented with the first part of a hypothetical scenario. Respondents were asked to imagine a situation in which they were considering taking a PSY101 course in order to fulfill a general education requirement. Respondents were told that the course fit within each of their schedules and were provided with the course catalog description. Based upon the situation and course description, respondents answered pre-stimuli questions including attitude toward the course, likelihood of enrolling in the course, confidence in the decision, and likelihood of recommending the course to others.

For the second part of the scenario, each subject was randomly assigned to one of eighteen treatments. Each treatment provided respondents with online reviews about the course and/or professor. The online reviews included numeric ratings for overall quality, helpfulness, clarity, and easiness and three written comments. The valence variation included negative numeric ratings (2 out of 5) with three negative comments, positive ratings (5 out of 5) with three positive comments, or mixed ratings (3.5 out of 5) with one negative, one positive, and one mixed comments. The review content variation included describing attributes of the professor (e.g., good professor), attributes of the course (e.g., good course), or both (e.g., good professor and good course). The review source variation included describing the source of the information as anonymous, voluntary reviews from RMP or summaries of official university-administered ratings.

After reviewing the scenario, each respondent completed a self-administered survey. The survey consisted of a series of questions that measured attitude toward the course, perceived value of the reviews, effect of the eWOM communication, likelihood of enrolling in the course, confidence in the decision, and likelihood of recommending the course to others. Other variables assessed in the questionnaire included importance of online reviews for course selection, previous use of online reviews in course selection, and demographics. After completion and submission of the survey, the respondents were thanked for their participation.

Measures and Manipulation Check

Six dependent variables were measured using three multi-item scales and three single-item measures. The measure for perceived value of the reviews was adapted from Kim and Gupta (2012). The scale consisted of six Likert-type statements with a seven-point scale representing review descriptors such as useful, learned a lot, and provided valuable information (α = .848). The measure for attitude toward the course was adapted from Schlosser (2011). The scale consisted of three semantic differential scales with seven-points: very bad-very good, uninteresting-interesting, and enjoyable-unenjoyable (α = .963). The measure for word-of-mouth

effect was adapted from Park and Lee (2009). The scale consisted of three Likert-type statements with a seven-point scale representing review descriptors such as useful in decision making, credibility, and impacted my decision ($\alpha = .821$). Scores for each multi-item scale were averaged to create single measures. Three pre-post behavioral intentions were measured using single items: (1) likely to take the course using a seven-point "very unlikely" to "very likely" scale, (2) confidence in the decision using a seven-point "not confident at all" to "very confident" scale, and (3) likely to recommend the course using a seven-point "very unlikely" to "very likely" scale. Scores for each behavioral intention measure were differences between responses before and after the treatment.

An initial analysis indicated no significant mean difference for any of the measures among the three levels of the review content variation or among the two levels of source variation, $p > 0.05$. As expected, the results did indicate significant mean differences among the three levels of valence variation. The manipulation check for valence used an average of two, seven-point semantic differential scales using very unfavorable / very favorable information and very negative / very positive information. The manipulation check revealed a significant difference among all three variations, $M_{Negative} = 2.12$ versus $M_{Mixed} = 4.21$ versus $M_{Positive} = 6.28$, $F(1,387) = 414.06$, $p < .001$. As such, respondents were collapsed into three groups: negative, positive, and mixed valence.

Sample

Over the course of a one-week period, 443 individuals agreed to participate in the study by clicking on the survey link provided in the invitation e-mail. Each participant was randomly assigned to one of three scenarios. After excluding participants that showed signs of response bias and/or provided incomplete responses, the final sample consisted of 391 subjects, yielding a final response rate of 88%. The vast majority of the subjects excluded abandoned the survey prior to completion. Sample size by valence variation was positive ($n = 131$), negative ($n = 129$), and mixed ($n = 131$).

All participants in the sample were undergraduate university students. Excluding missing data, the majority were female (59% vs. 41% male), domestic (98% vs. 2% international), and upperclassman (86% vs. 14% underclassman). The sample represented a wide range of majors including business (24%), health sciences (14%), education (11%), communications (20%), arts & sciences (20%), and other (9%). The vast majority were between 18 and 22 years old (90%). Almost all respondents in the sample had previously used an online professor rating website (91%) with almost two-thirds indicating using online professor ratings websites for at least half of the university courses they had previously taken (66%). More than half of the respondents indicated using online professor ratings websites to find information about professors for general education courses (75%), to select among courses (62%) and to select among professors (75%). In addition, 63% of respondents indicated they had decided not to take a course or professor after reviewing negative information on an online professor rating website in the past.

RESULTS

Mean differences among the levels of valence for each of the six dependent variables were analyzed using between-subjects ANOVA. Table 1 (Appendix) provides the means or mean differences and statistics for each of the six dependent variables. H1 predicted

significantly lower means for (a) attitudes toward the course, (b) intentions to take the course, and (c) intentions to recommend the course for negative reviews as compared to mixed reviews and positive reviews. Tukey's post hoc analyses suggested significant mean differences across all three dependent measures where negative was the lowest and positive was the highest. As such, H1a, H1b, and H1c are supported. H2 predicted a significantly higher mean for confidence in course selection for positive reviews as compared to negative reviews and mixed reviews. Tukey's post hoc analysis suggested a significant mean difference between both positive and negative and positive and mixed yet also indicated that the means for negative and mixed were equal. As such, H2 is supported. H3 predicted significantly lower means for (a) perceived value of the reviews and (b) eWOM effect for mixed reviews as compared to positive reviews and negative reviews. Tukey's post hoc analysis suggested a significant mean difference between both mixed and negative and mixed and positive for both dependent measures, yet also indicated that the means for negative and positive were equal for both dependent measures. As such, H3a and H3b are supported.

DISCUSSION

The escalating prevalence of electronic communication and specifically eWOM is changing the way that consumers search for information, evaluate alternatives, and make choices. Understanding the role that eWOM plays in the consumer decision making process is important to researchers and marketers as it has been shown to ultimately influence product sales. While past research has examined eWOM effects in terms of consumer perceptions and behaviors, the findings have been mixed. While some researchers have argued that positive reviews are more influential than negative reviews (East, Hammond & Lomax, 2008), others have suggested the contrary (Park & Lee, 2009). In an effort to further explore the impact of information direction, the current study investigates the effects of eWOM valence within the context of professor and course evaluations that are available online.

The overall findings of this study indicate that positive-only (negative-only) reviews had very strong, positive (negative) influences on changing behavioral intentions towards the course. However, even though these reviews changed initial behavioral intentions, both types of reviews were perceived as equal with respect to the value/influence of the reviews. Conversely, mixed reviews had little influence on changing initial behavioral intentions and were perceived as having far less influence/ value than either positive or negative reviews. These results imply that information direction is a significant factor in consumer choice.

First, the influence of information direction varies in terms of specific perceptual and behavioral outcomes. In particular, negative reviews were found to be more influential than positive and mixed reviews when it comes to attitudes toward the course, intention to take the course, and intention to recommend the course. Furthermore, positive reviews are more likely than negative reviews and mixed reviews to result in higher confidence in course choice. Considering that negative reviews are likely to result in negative outcomes (i.e., attitudes and intentions), it is important for marketers to attempt to manage the flow of negative information. While the presence of some negative feedback might enhance the overall perceived credibility of eWOM communications (Doh & Hwang, 2009) too much negative information could result in severe consequences. In the digital age, this information is transmitted rapidly and through a plethora of media channels which means that it can quickly become uncontrollable. Conversely, as consumers receive positive information, they feel more confident in their choices. Self-

assured consumers may feel that their choices are affirmed even when the affirmation comes from random persons online. Consumer confidence is likely to positively impact overall satisfaction and result in decreased instances of regret and dissonance.

Second, the results of this study contradict previous findings that (a) suggest two-sided arguments may be more valuable than one-sided arguments due to improved information credibility and (b) including negative information will produce a negativity effect in which consumers assign more weight to negative information as compared to positive information in descriptors of others. Similar to Edwards and Edwards (2012), this study suggests mixed eWOM reviews may have limited value to consumers rather than having positive influence due to increased credibility or a negative influence due to the negativity effect. In the absence of source information (e.g., reviewer credibility or reviewer-user similarity), the limited information value of conflicting reviews may motivate users to seek additional information in order to resolve information inconsistencies. According to the integrated response model (Smith, 1993), consumers tend to discount weakly held beliefs derived from ad-based information in favor of more confidently held beliefs derived from experience-based information. As such, marketers could address the effects of mixed reviews by offering consumers samples or experience trials. In the context of higher education, instructors with mixed reviews may find that students will wait to form solid judgments until after experiencing the course directly. The desire to develop beliefs about a course through experience may result in an increased likelihood that students will register for more courses than desired with the intention of dropping a course after a trial experience. Similar to other consumer experiences with easily accessible reviews (e.g., music, movies, books, and video games), institutions may want to consider offering sample lectures or sample syllabi readily available to students at the point of registration.

In summary, although the experiment conducted in the study centers on students' perceptions of online recommendations in a professor/course decision making process, the study more generally contributes to the knowledge of marketers by providing insights into consumers' attitudes, behaviors, and consumer choice patterns that may come into play for other service or product decisions involving eWOM. Specifically, the results of this study may also apply to other products and services with prominent consumer reviews such as music, movies, television series, books, and video games. Additional research is needed to test the effects of eWOM valence across other product and service categories.

LIMITATIONS AND FUTURE RESEARCH

Although our research findings contribute to the understanding of eWOM valence and consumer decision making, our study is characterized by limitations that may provide opportunities for future research. One limitation is that our experiment is scenario-based and did not occur in an actual field setting. Although respondents found the scenarios believable, the questionnaire and experiment may not fully represent the professor and course selection process. Using scenarios, it is not possible to capture all of the nuances an actual customer encounters in the field, so it may be difficult for respondents to predict their perceptions, choices, and purchase intentions in these hypothetical situations. Future research should investigate these phenomena under real-life circumstances.

In addition, respondents in this study made their decisions solely based on eWOM. In real settings, eWOM is often used in combination with other sources of information such as direct WOM and advertising. For instance, students often consider both eWOM from websites

like RMP and traditional WOM from friends that have already taken specific courses before making a decision. Thus, limiting respondents to only one source of information may have impacted the decision making process. Future research might consider the impact of eWOM in conjunction with the impacts of other types of reviews and other sources of information.

Finally, future research might also examine the impacts of variances in the ratings on eWOM websites. Recent research found that variances in the ratings for books sold online plays a significant role in market outcomes (Sun, 2012). Specifically, the author discovered that even when average book ratings were low, high variances in the ratings still resulted in increased demand (Sun, 2012). Similar results could be discovered with variances in eWOM effects for other types of products and on other websites such as RMP, and could provide managers with significant insight in terms of consumer purchasing behavior.

REFERENCES

Bickart, B. & Schindler, R.M. (2001). Internet forums as influential sources of consumer information. *Journal of Interactive Marketing, 15*(3), 31-40.

Bone, P.F. (1995). Word-of-mouth effects on short-term and long-term product judgment. *Journal of Business Research, 32*(3), 213-223.

Brown, M.J., Baillie, M., & Fraser, S. (2009). Rating RateMyProfessors.com: a comparison of online and official student evaluations of teaching. *College Teaching, 57*(2), 89-92.

Chang, C.C., & Chin, Y.C. (2010). The impact of recommendation sources on online purchase intentions: the moderating effects of gender and perceived risk. *World Academy of Science, Engineering and Technology, 66*(June), 111-114.

Chatterjee, P. (2001). Online reviews: do consumers use them? In *Advances in Consumer Research Volume 28*, Gilly, M.C. & Myers-Levy, J. (eds.). Valdosta, GA: Association for Consumer Research, 129-133.

Cheung, M.Y., Luo, C., Sia, C.L., & Chen, H. (2009). Credibility of electronic word-of-mouth: informational and normative determinant of on-line consumer recommendations. *International Journal of Electronic Commerce, 13*(4), 9-38.

Clemons, E. K., Gao, G.G., & Hitt, L. M. (2006). When online reviews meet hyperdifferentiation: A study of the craft beer industry. *Journal of Management Information Systems, 23*(2), 149-171.

Cone Online Influence Trend Tracker (2011), retrieved from http://www.conecomm.com/2011coneonlineinfluencetrendtracker

Dellarocas, C. (2003). The digitization of word of mouth: promise and challenges of online feedback mechanisms. *Management Science, 49*(10), 1407-1424.

Doh, S. & Hwang, J. (2009). How consumers evaluate eWOM (Electronic Word-of-Mouth) messages. *CyberPsychology & Behavior, 12*(2), 193-197.

East, R., Hammond, K., & Lomax, W. (2008). Measuring the impact of positive and negative word of mouth on brand purchase probability. *International Journal of Research in Marketing, 25*(3), 215-224.

Edwards, C., Edwards, A. Qing, Q., & Wahl, S.T. (2007). Influence of computer-mediated word-of-mouth communication on student perceptions of instructors and attitudes toward learning course content. *Communication Education, 56*(July), 255-277.

Edwards, A. & Edwards, C. (2012). Computer-mediated word-of-mouth communication: the influence of mixed reviews on student perceptions of instructors and courses. *International Conference on Communication, Media, Technology, and Design*, *62*(2), 89-94.

Equity Marketing Solutions (2013) white paper. Retrieved from http://www.equitymarketingsolutions.com/marketing/e-commerce-ratings-reviews-white-paper/

Floh, A., Koller, M., & Zauner, A. (2012). The effect of eWOM messages: an experimental approach. *2012 Academy of Marketing Conference*. Retrieved from http://marketing.conference-services.net/directory.asp.

Gershoff, A. D., Mukherjee, A., & Mukhopadhyay, A. (2003). Consumer acceptance of online agent advice: extremity and positivity effects. *Journal of Consumer Psychology, 13*(1/2), 161-170.

Hartman, K. B. & Hunt, J.B. (In Press). What RateMyProfessors.com reveals about how and why students evaluate their professors: a glimpse into the student mindset. *Marketing Education Review*, Forthcoming 2013.

Hennig-Thurau, T. & Walsh, G. (2003). Electronic word-of-mouth: motives for and consequences of reading customer articulations on the internet. *International Journal of Electronic Commerce, 8*(2), 51-74.

Herr, P.M., Kardes, F.R. & Kim, J. (1991). Effects of word-of mouth and product attribute information on persuasion: an accessibility-diagnosticity perspective. *Journal of Consumer Research, 17*(4), 454–462.

Huefner, J.C., Parry, B.L., Payne, C.R., Otto, S.D., Huff, S.C., Swenson, M.J., & Hunt, H.K. (2002). Consumer retaliation: confirmation and extension. *Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behavior, 15*, 114-127.

Kim, J. & Gupta, P. (2012). Emotional expressions in online user reviews: How they influence consumers' product evaluations. *Journal of Business Research, 65*(7), 985-992.

Laczniak, R.N., DeCarlo, T.E. & Ramaswami, S.N. (2001) Consumers' responses to negative word-of-mouth communication: an attribution theory perspective. *Journal of Consumer Psychology, 11*(1), 57-73.

Lee, J., Park, D. H. & Han, I. (2008). The effect of negative online consumer reviews on product attitude: An information processing view. *Electronic Commerce Research and Applications, 7*(3), 341-352.

Lin, C.S., Tzeng, G.H., Chin, Y.C., & Chang, C.C. (2009). The effect of recommendation sources and consumer involvement on trust and purchase intentions in online and offline environments. Working paper. Retrieved from http://www.scribd.com/doc/135504149/25.

Mudami, S.M. & Schuff, D. (2010). What makes a helpful online review? A study of customer reviews on Amazon.com. *MIS Quarterly, 34*(1), 185-200.

Park, P. & Lee, T.M. (2009). Information direction, website, reputation, and eWOM effect: a moderating role of product type. *Journal of Business Research, 62*(1), 61-67.

Park, D.H, Lee, J., & Han, I. (2007). The effect of on-line consumer reviews on consumer purchasing intention: the moderating role of involvement. *International Journal of Electronic Commerce, 11*(4), 125-148.

Sawyer, A.G. (1975). Demand artifacts in laboratory experiments in consumer research. *Journal of Consumer Research, 1*(4), 20-30.

Schlosser, A.E. (2011). Can including pros and cons increase the helpfulness and persuasiveness of online reviews? The interactive effects of ratings and arguments. *Journal of Consumer Psychology, 21*(3), 226-239.

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.

Skowronki, JJ. & Carlston, DE. (1987). Social judgment and social memory: the role of cue diagnosticity in negativity, positivity, and extremity biases. *Journal of Personality & Social Psychology, 52*(4), 689-699.

Smith, R.E. (1993). Integrating information from advertising and trial: processes and effects on consumer response to product information. *Journal of Marketing Research*, *30*(May), 204-219.

Sun, M. (2012). How does the variance of product ratings matter? *Management Science, 58*(4), 696-707.

Timmerman, T. (2008). On the validity of RateMyProfessors.com. *Journal of Education for Business, 84*(1), 55-61.

Vimaladevi, K. & Dhanabkaym, M. (2012). A study on the effects of online consumer reviews on purchasing decision. *Prestige International Journal of Management & IT- Sanchayan*, *1*(1), 91-99.

Yali, A., & Bayram, M. (2012). eWOM: the effects of online consumer reviews on purchasing decisions. *International Journal of Internet Marketing and Advertising, 7*(1), 51-64.

Xia, L. & Bechwati, N.N. (2008). Word of mouse: the role of cognitive personalization in online consumer reviews. *Journal of Interactive Marketing, 9*(1), 3-13.

APPENDIX

Table 1: Means and Mean Differences for Dependent Variables

		Negative	Mixed	Positive	
		M	*M*	*M*	*F*
H1a	Attitude toward course	2.71	4.31	5.83	241.77 (2, 366)*
H3a	Perceived value of reviews	5.27	4.70	5.48	19.24 (2, 388)*
H3b	WOM effect	5.33	4.83	5.57	14.37 (2, 287)*
		*M*Δ	*M*Δ	*M*Δ	
H1b	Likely to take course	-1.98	-0.21	0.83	76.71 (2, 388)*
H2	Confidence in decision to take course	-0.62	-0.27	0.43	17.85 (2, 387)*
H1c	Likely to recommend	-1.65	-0.52	1.03	87.12 (2, 386)*

* $p < 0.01$