The Role of Positive and Negative eWOM for Restaurant Information Search Process and Visit Intentions

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Abstract:

This study examines the effect of positive and negative effects of eWOM in the context of restaurant services. We use information search processing theory in the consumers' decision-making process, theory of reasoned action, as well as the role of reference groups as a background. Empirical study conducted throughs survey (Study 1) and an experiment (Study 2) has shown that a negative eWOM has a stronger role in importance of online information search for visit-decision making, while within experimental study Facebook friend recommendation presents a main source of information in this process. Based on findings, we present theoretical and practical contributions.

Keywords: eWOM, reference group, information search

1. Introduction

Understanding purchase-decision process of customers in predicting their future intentions has been the topic not only of many theories (Han and Kim, 2010), but also known to be intricate from both practical and research perspective (Lam and Hsu, 2006). Marketing literature distinguishes five different and related phases, imposing information search as the second phase (Kotler, 2002). Generally speaking, consumers tend to fulfill their needs according to their rational choice, which is well recognized in the paper offered by Simon (1955) who had formulated three decision-making steps to be of immediate importance for this choice: intelligence, design and choice. The logic behind says that after need recognition (intelligence), in the design phase, customers structure the need and make their final decision choosing the best solutions that meet defined criteria (choice).

All of these approaches seem to have main characteristic in common which circles around the question what are the crucial elements to be considered when identifying how the need will be satisfied. In this context, prior research has emphasized the role of product or service online reviews on purchase decision. Chevalier and Mayzlin (2006) have concluded that the number of reviews is positively related to online book sales. This conclusion is akin to the one offered by Zhang et al. (2014) who investigated the influence of online review feature set on behavioral intentions. The relevance of product information has been found to be important in the paper by Moskowitz (1994) proving their power to modify an acceptance by customers. In addition to main feature of prior research, they have been mostly focused on the final phase of the process (Han and Ryu, 2012; Rödiger, Plaßmann, & Hamm, 2016), different antecedents (Green and Chalip, 1998; Kujawińska, Rogalewicz, & Diering, 2016) or a wide range of research setting such as airline (Wang, 2004), food (Graham and Jeffery, 2011) or fashion industries (Cengiz, 2017). Nevertheless, as stated by Jang et al. (2012), the use of product or service reviews at the individual level in different stages of purchasing process has been still unexplored. This is why the central tenet of this study is positioned through online information search considering positive and negative word of mouth (hereinafter WoM) to explore how they affect purchase decision-making.

We have applied the two-phase procedure to test the main assumption of the study. First, quantitative research tests the model, which posits that positive and negative eWOM act as moderators in relationship between online restaurant information search (ORIS) and relevance of social networks for restaurants visit decision-making (RDM). Second, our online experiment provides an insight into the effect of positive and negative eWOM, shaped as Facebook page recommendations and Facebook friend recommendations, on an appearance of stronger or weaker intention to visit a restaurant. This study contributes to the building of existing knowledge attempting to understand the effects of the positive and negative eWOM on consumer decision-making, and in that way contribute to understanding of this new and important communication mix element. From the practical point of view, the main findings of the study shed light on importance of consumers' opinion regarding services and the way in which it is delivered, as their experiences, once shared and public, become truly relevant for business building.

2. Research Background

The main preposition of our conceptual model has been found in the Theory of reasoned action, according to which behavioral intentions, and behavior as their consequence, depend on attitude and subjective norms (Fishbein and Ajzen, 1975). In other words, the theory sheds light on the nature of relationship between these concepts (Fishbein, 1967). In context of this study, ORIS presents an attitude, which people may have as a result of previous experience

regarding selection of a restaurant. The experience has been made by their own, or it relies on experience shared by other people. This assumption could be incorporated within the claim provided by Ajzen and Driver (1991) who have conceptualized an attitude as the feature that is conditioned by beliefs regarding the repercussions. In this model, the attitude is affected by subjective norms. As outlined in the paper by O'Neal (2007), subjective norms are how individuals perceive a certain social influence, while the main outcome of this influence is delivered through the specific behavior. In relation to our model, subjective norms present positive and negative eWOM, as they present form of social influence, which people usually seek and follow. Finally, we see our relevance of social networks for restaurants visit decision-making as behavior element of the theory.

In further consideration of the proposed model, a central role belongs to eWOM, the construct that has been seen as an important element assessed by clients in the pre-purchase phase (Mangold, 1999). With the emergence of the Internet and, more importantly, increased popularity of social network sites, eWOM was established as a new communication tool. Hennig-Thurau et al. (2004) have defined eWOM as "any positive or negative statement made by potential, actual, or former customers about a product or company, which is made to be available to a multitude of people and institutions via the Internet." Furthermore, it is important to differentiate between positive and negative eWOM. "Positive eWOM might include making others aware that one does business with a company or store and making positive recommendations to others about a company" (Brown, 2005). On the other hand, negative eWOM is the exact opposite with consumers sharing negative experiences with brands. "Positive eWOM communications can improve consumers' attitudes towards a product/service and increase sales, while negative eWOM can cause serios and sometimes even irreversible damage to the business" (Ismagilova, Dwivedi, Slade & Williams, 2017). As a consequence recent trends, eWOM has proved to be more effective in some situations than the traditional marketing tools of personal selling and various types of advertising (Katz & Lazarfeld, 1955; Engel, Blackwell & Kegerreis, 1969). Prospective customers visit web sites and read reviews from other customers to learn more about a product before making a purchase (Doh & Hwang, 2009). Thus, eWOM extends customers' choices for gathering information about products and services from other customers. In other words, the electronic environment serves as an innovative venue for gathering reliable information, which is in line with the assumption that social networks represent a basic vehicle for eWOM (Chu & Kim, 2011).

Intangibles such as restaurant services cannot be evaluated prior to consumption experience; thus consumers tend to relay on eWOM to reduce their level of perceived risk and uncertainty (Klein, 1998; Lewis & Chambers, 2000). Litvin et al. (2004) suggested that tourists' restaurant selections are predominantly influenced by the recommendations of friends or relatives and recommendations of staff at a hotel, with surprisingly few decisions being based on the influences of more formal media such as guide books and advertisements in magazines or newspaper, which may eventually lead customers to become dependent on the interpersonal influence of eWOM (Lewis & Chambers, 2000). Sussking (2002) have found that customers who reported problems with their food had engaged in significantly more negative WOM communications as compared with those who had had problems with the service. Furthermore, Zhang et al. (2014) have proved that food taste, restaurant environment and service have an impact on customer positive eWOM, whereas food taste, physical environment and price have an impact on negative eWOM. Hence, the performance of attributes has an asymmetric impact on positive and negative eWOM for the restaurant industry. Interestingly, studies show that the impact of negative eWOM is likely to be more influential than that of a positive one (Gruen, et al., 2006; Lee et al. 2008; Boo & Kim, 2013).

Wetzer et al. (2007) indicated that negative emotions are related to negative goals (e.g. warning and revenge) for negative WOM and that those goals may influence the content of the communication that is spread to others, whereas negative goals with negative emotions are stronger than positive goals (e.g. entertaining experiences). According to the study done by Dichter (1966), positive WOM is likely to increase customers' purchase intentions for new products/services, because it reduces the risks involved in the purchase. Moreover, the unique characteristics of eWOM communication may leverage the power of positive eWOM to influence customers' decision-making processes. In a particular case of restaurant services, recommendations usually respond to the simple question "Where to eat?", which has become an integrated part of the social network sites structure. In particular, some social network sites have specialized in giving such, user-based, recommendations. Therefore, we hypothesize:

H1: *Online restaurant information search is positively related to the relevance of social networks for restaurant visit decision-making.*

H2: *(a) Positive, (b) Negative e-WOM are moderating the effect of the online restaurant information search on the relevance of social networks for restaurant visit decision-making.*

H3: *Positive (vs. negative) eWOM effect in a form of (a) Facebook page recommendation, (b) Facebook friend recommendation will prompt stronger (vs. weaker) intention to visit a restaurant.*

The overall conceptual framework with all hypotheses is presented in the Figure 1.

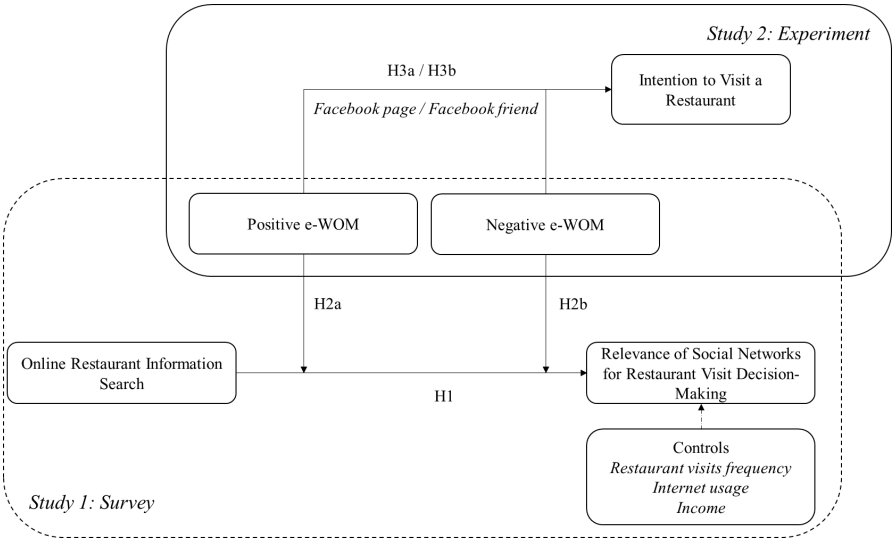

Figure 1. Conceptual two-phase procedure framework

3. Methodology

We tested the outlined conceptual model in two steps presented, by conducting two consequent studies. First, we have pursued a quantitative survey (Study 1) measuring positive/negative e-WOM, online restaurant information search process and relevance of social networks for restaurant visit decision-making. We control for restaurant visits frequency, the Internet usage and income of respondents. Questions were adapted from already existing studies (e.g. East, Hammond & Lomax, 2008).

The survey was conducted online, and 202 usable questionnaires returned in time for the analysis (25% response rate). Sample is balanced when it comes to gender structure, with

55% female and 45% male respondents. Age range of respondents is between 17 and 65, with the average age being 31. When it comes to education, 49% of the respondents have university degree, while 25% have masters-level degree. 75% of the respondents are employed, 15% students, 8% unemployed and the rest are retired. When mentioning the frequency of the Internet usage, 43% reported to use the Internet 3-6 hours per day, while 10% stated they use the Internet more than 12 hours in a day. Majority of the sample, 39%, visit restaurants 3-5 times, followed by 28% ones who visit restaurants 2 or less times a month. There were 18% respondents who visit restaurants 5-10 times and 8% ones who visit restaurants 10-15 times a month, while the rest are visiting restaurants almost daily. Average spending per restaurant visit is between 50 and 100 EUR.

In our second study (Study 2), we contextualized the research even more, by conducting an experiment that involved an example of a restaurant and controlling for two conditions: (positive and negative) eWOM and Facebook (page and friend) recommendation. We used a between-sample experimental design where respondents were randomly assigned to conditions. The experiment was available online and when respondents entered the designated link, they were first presented with the short and informative Youtube video of the selected real restaurant. After they have watched the video, respondents were randomly assigned to first view a Facebook page recommendation for that restaurant (with separate positive and negative condition).

Facebook page recommendation was displayed on the screen with clearly visible overall rating score (i.e. stars) which was set to 1.9 in the negative condition and to 4.4 in the positive condition, and then two comments by unknown persons were displayed (positively/negatively) describing the restaurant. When proceeding to the next step, respondents were again randomly assigned to the following scenario question: "After all that you have previewed, you have also read on Facebook that your friend had a positive/negative experience with this restaurant." Finally, the respondents were asked how like it is that they would intend to visit this restaurant in the next period.

There were 140 participants in the experiment in total, with minimum 28 and maximum 38 of respondents belonging to each of the four conditions. Respondents' age ranged from 19 to 63, with the average age of 32 and there were 58% of female respondents.

4. Results

4.1. Results of the Study 1

Before assessing the conceptual model of our quantitative study, we have conducted the test of reliability of the multi-item constructs used by examining the internal consistency coefficient (Cronbach's alpha). All coefficients have had acceptable values above 0.80 (Nunnally, 1978). For the purpose of further analysis, we have aggregated all multi-item constructs based on the average value.

In order to empirically verify our model, we used the PROCESS routine in SPSS (Hayes, 2017; Preacher & Hayes, 2008). Specifically, we estimated a moderation model (Model 2) with 5,000 bootstrap samples and 95% bias corrected confidence intervals. Our findings are presented in Table 1.

H	Effects	Coefficient (S.E.)
	Direct effects	
H1	Online Restaurant Information Search	0.293^{***} (0.073)
	Positive eWoM	0.289^{***} (0.079)
	Negative eWoM	0.143 (0.080)

	Moderating effects	
H2a	Online Restaurant Information Search x Positive eWoM	-0.078 (0.082)
H2b	Online Restaurant Information Search x Negative eWoM	0.152** (0.082)
	Controls	
	Restaurant Visits Frequency	0.036 (0.060)
	Internet Usage	0.057 (0.068)
	Income	-0.109 (0.082)
	R^2	0.39

Notes: Dependent variable: relevance of social networks for restaurant visit decision-making; *** - $p < 0.001$, ** - $p < 0.05$.

Table 1. Empirical results

The results from Table 1 indicate that online restaurant information search positively and significantly influences relevance of social networks for decision-making related to the restaurant visit (B = 0.293, $p < 0.001$). Thus, we have confirmed H1. Interestingly, positive eWOM does not act as a moderator of the main relationship, but has a direct and positive effect on the relevance of social networks for making a decision about the visit (B = 0.289, $p < 0.001$). In contrary, negative eWOM acts as a pure moderator of this relationship and further strengthen the effect of online information search on the relevance of social networks for the decision-making process (B = 0.152, $p < 0.05$). This moderating effect is illustrated in Figure 2, from which it can be clearly seen the lower negative eWOM, the lower levels impact of ORIS for RDM. Also, when there is a high negative eWOM the process of information search and its effect on relevance of social networks for decision-making becomes higher and stronger.

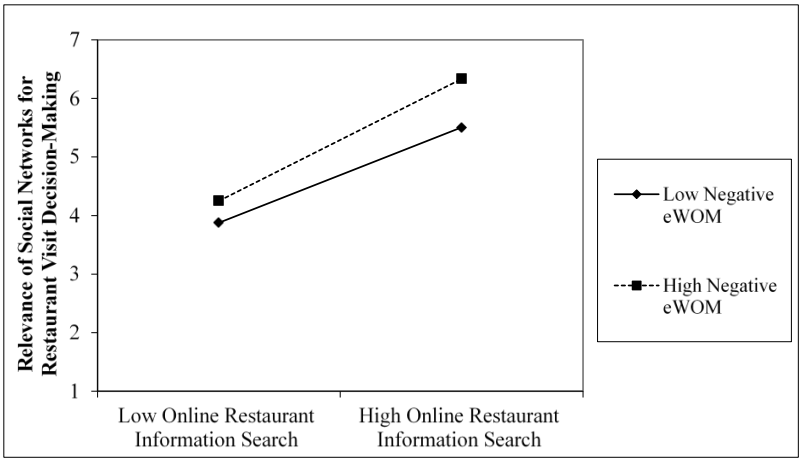

Figure 2. Moderating effect of negative eWOM

The framework has a strong explanatory power since it explains 39% of the variance in the relevance of social networks for restaurant visit decision-making. Interestingly, none of the control variables are significant for the model, which shows the model robustness.

4.2. Results of the Study 2

In order to assess the results of the experiment, we have utilized ANOVA Facebook friend recommendation and Facebook page recommendation as between subject factors for the intention to visit a restaurant. The main effect of Facebook friend recommendation is

significant ($F(1,57) = 16.32$, $p < 0.001$), while the main effect of Facebook page recommendation on the dependent variable is not ($F(1,2) = 0.32$, ns).

In order to explore the effect of the two types of recommendations and to test our H3, we compared the means in the intention to visit a restaurant for four different conditions:
C1: the mean for the negative Facebook page recommendation and negative Facebook friend recommendation group (N = 28) = 3.50 (Std. dev = 1.95);
C2: the mean for the negative Facebook page and positive Facebook friend recommendation group (N = 37) is 4.92 (Std. dev = 1.75);
C3: the mean for the positive Facebook page and negative Facebook friend recommendation group (N = 37) is 3.81 (Std. dev = 1.99) and
C4: the mean for the positive Facebook page and positive Facebook friend recommendation group (N = 38) is 4.97 (Std. dev = 1.81).

The mean difference between the Facebook friend recommendations in the negative Facebook page condition was -1.42 ($p<0.001$) and the strongest effect of difference is observed particularly here, while the mean difference in the positive Facebook page recommendation condition was -1.16 ($p<0.001$). Figure 3 presents these findings.

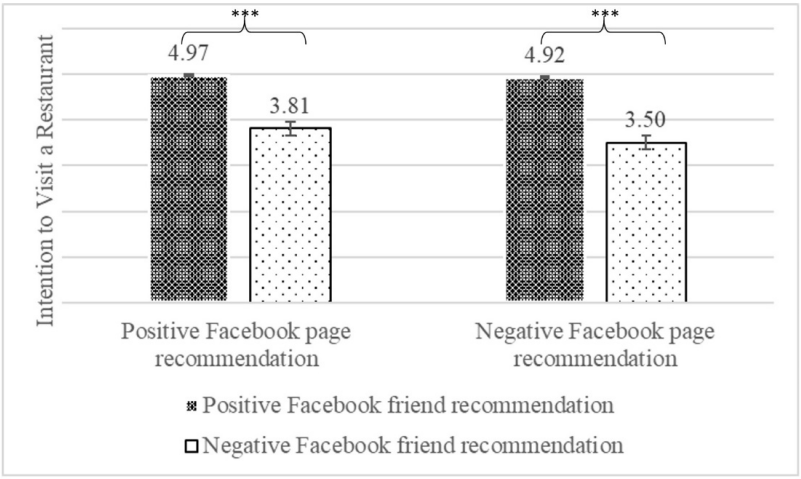

Figure 3. Experiment results

Consequently, we can conclude that our H3 in the case of Facebook friend recommendation (H3b) has been confirmed. For the Facebook page recommendation there is no significant difference in the intention to visit a restaurant with respect to the valence of eWOM.

5. Discussion and Conclusions

This two-step conceptualized study has examined the effect of positive and negative effects of eWOM, as featured as an important moderator (De Matos & Rossi, 2008), in the context of restaurant service. At the outset, the findings from empirical study (Study 1) have supported the Theory of reasoned action (Fishbein and Ajzen, 1975). More specifically, the relevance of social networks for restaurant visit-decision making (behavior) depends on attitude (collected information) and subjective norms (positive and negative eWOM. It is proven that only negative eWOM behaves as a moderator within this relationship. In case of high level of a negative eWOM, the process of ORIS and its effect on RDM becomes higher and stronger. This is in line with the results of the study by Charlett, Garland and Marr (1995) and it also provides an upgrade to the findings offered by Vázquez-Casielles, Suárez-Álvarez

& del Río-Lanza (2013). Park and Lee (2009) have also proved a greater effect of a negative eWOM, but for experience goods, while in search goods setting this effect is weaker. The results of our study complemented their findings by offering this effect to be more relevant for a search phase. Thus, we have confirmed H1 and H2b, while it is noted that positive eWOM does not act as a moderator of the main relationship (H2a), but has a direct and positive effect on the relevance of social networks for making a decision about the visit.

Within our Study 2, we conducted an experiment analysing positive and negative eWOM effect in a form of Facebook page and friend recommendation using between-sample experimental design. We have revealed that the main effect of Facebook friend recommendation is significant, while for Facebook page recommendation this is not the case. Facebook friend recommendations, according to these results, act as crucial mechanism which people rely on in their intention to visit a restaurant. Furthermore,

This study offers several contributions. Most of the previous studies have placed eWOM to be an antecedent (Abubakar & Ilkan, 2016; Yoo, Sanders & Moon, 2013) or an outcome (Wallace, Buil & de Chernatony, 2014) in variety of research contexts. Our study, from theoretical perspective, improves existing literature as it reveals an additional role in interesting research settings. Also, our study extends the applicability of the Theory of reasoned action. Although its role has been found to be important in consumer research (Bagozzi, Baumgartner & Yi, 1992; Oliver & Bearden, 1985), in recent years only few studies have incorporated its relevance into their research models (Hussain, Rahman, Zaheer & Saleem, 2016; Procter, Gainsbury, Angus & Blaszczynski, 2019), leaving it outside of eWOM context. From practical point of view, we believe that the main findings of our study could be useful to restaurant managers and owners. As influential tool, eWOM presents a path to potential target market. Knowing what motivate customers provide a positive feedback, additional effort should be paid to maintaining social networks updated in order to attract customer opinion.

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