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**Pictorial content, sequence of conflicting online reviews and consumer decision-making: The Stimulus-Organism-Response Model revisited**

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## **Pictorial content, sequence of conflicting online reviews and consumer decision-making: The Stimulus-Organism-Response Model revisited.**

### **Abstract**

Conflicting online reviews challenge the consumer's decision-making processes. Furthermore, the increase in visual content, both positive and negative, adds complexity. This study analyses conflicting online reviews based on text and photos using automatic processing patterns and conscious perceptions. The study is built on the stimulus-organism-response model revisited by Jacoby (2002), and captures nonlinear eye-tracking data and a questionnaire. A fsQCA analysis suggests that the order of the positive and negative stimuli strongly influence the way respondents perceive the overall meaning of a sequence of online reviews, supporting primacy-recency effects. In addition, the visualization pattern is shown to be similar, regardless of the valence sequence of the online reviews. The visual attention paid to the pictorial content is at the expense of attention paid to the text. Theoretical contributions to the stimulus-organism-response model and managerial implications are proposed.

**Keywords:** S-O-R model; online reviews; eWOM; pictorial content; fsQCA; eye-tracking

### **1. Introduction**

Online reviews are an important information source that facilitate consumers' purchase decisions (Gavilan, Avello, & Martinez-Navarro, 2018; Kwok, Xie & Richards, 2017). Recent market research revealed that, in 2018, 65 percent of customers read online reviews for local restaurants and cafes, while 78 percent trust online reviews as much as recommendations from friends or family members (Brightlocal, 2018). In addition, the recent proliferation of social media websites that facilitate the sharing of travel experiences makes the role of online consumer reviews increasingly pertinent for the tourism and hospitality

industry. In the tourism sector, user-generated content (UGC) drives brand choice (Bigné, Ruiz & Curras, 2019). Consumers cannot judge value and cost prior to purchasing tourism services; thus, electronic word of mouth (eWOM) plays a key role in reducing information asymmetry and guiding consumer decisions (Fang, Ye, Kucukusta & Law, 2016; Liu, Zhang, Law & Zhang, 2019). However, when searching for advice, consumers frequently encounter contradictory online reviews in terms of valence of opinion.

Therefore, questions arise as to how consumers process conflicting opinions which lack an evaluative direction. Based on conflicting online reviews, the research aim of the present study is twofold. First, to analyze how pictorial content and the sequencing of online reviews affect consumer information processing by means of an eye-tracking study. Second, to employ fuzzy-set qualitative comparative analysis (fsQCA) to model the complex causal relationships, and detect common patterns, between conscious consumer responses to online reviews, obtained from a questionnaire, that can lead to high and low scores for customer purchase intentions.

Given the intangibility of tourism experiences, which cannot be experienced in advance, pictorial content is a pivotal tool used by consumers on social media platforms to share experiences with other users. Studies have shown that photographs are visual cues that affect purchase decision-making (Underwood & Klein, 2002; Li, Huang & Christian, 2016). Although many studies have examined the effects of photographic images in tourism settings (see Li et al., 2016, for a review), an important but overlooked factor is that images have first to attract viewers' attention before they can affect their perceptions and elicit responses. Scholars have just started to recognize the importance of understanding and managing the consumer's visual attention when (s)he is confronted with large amounts of, often contradictory, information (Wang & Sparks, 2016). To address the above gaps, the present study combines eye-tracking measures (to record the consumer's visual attention, an unconscious reaction) and consumers' conscious information processing patterns to provide

in-depth knowledge of consumers' purchase decisions when faced with conflicting online reviews. TripAdvisor was chosen for the empirical analysis as it the most prevalent social media platform for rating tourism services. It is also the most widely investigated in the tourism domain (e.g. Tsao, Hsieh, Shih & Lin, 2015; Yoon, Kim, Kin & Choi, 2019). TripAdvisor combines text and pictures and allows travelers to filter comments on hotels, restaurants and tourism attractions depending on their valence. TripAdvisor provides comments on restaurants, which were chosen as the study context because (i) restaurants are a service with a high level of usage; (ii) consumers frequently access reviews for experience goods (Yoon et al., 2019).

Past literature has suggested that Mehrabian and Russell's (1974) stimulus-organism-response (S-O-R) model can be used to understand the effect of eWOM communications and online interactivity on customer behavior (Animesh, Pinsonneault, Yang, & Oh, 2011; Cambra-Fierro, Melero & Sese, 2017). The S-O-R model posits that environmental and informational cues act as stimuli that affect an individual's cognitive and affective reactions, which, in turn, affect behavioral intentions. Our theoretical framework is based on Jacoby's (2002) reconceptualization of the S-O-R model; this overcomes some of the limitations of the traditional S-O-R model and is able to accommodate automatic processing. The study adopts the main tenets of complexity theory (Woodside, 2013; 2014) to shed new light on consumers' perceptions of eWOM and their effects on their decision-making. It employs fuzzy-set qualitative comparative analysis (fsQCA) (Ragin, 2008) to model the complex causal relationships of consumers' conscious responses that lead to purchase intentions. The present study contributes significantly to the knowledge of online reviews and eWOM in three ways. First, the study addresses the complexity surrounding consumer behavior regarding online reviews. This is the first study to empirically examine the revised, and undoubtedly more advanced, version of the S-O-R model (Jacoby, 2002). Second, this study

adopts a multimethod approach. Multimethod studies are characterized by the coexistence of different methodologies as their hallmark feature (Anguera et al. 2018). Two methodological perspectives were used: (a) eye-tracking as a means of examining consumers' attention patterns; (b) an e-survey that measured consumers' active perceptions about conflicting online reviews. By using two methods the study aims to provide a more holistic investigation of consumers' behavior in online contexts. By incorporating realistic scenarios, the study provides fruitful insights and managerial implications regarding consumer behavior and the complex sequencing of online reviews. Third, to the best of our knowledge, this study is among the first to expand knowledge on how pictorial content interacts with the sequencing of the nature of online reviews (i.e., the order of positive and negative reviews) to influence consumers' purchase intentions. Scholars and managers can benefit from our findings as follows. First, the sequencing of the reviews involves a primacy effect that leads consumers to follow the valence of the first comment, either positive or negative. Second, the use of pictorial content enhances the diagnosticity of online reviews as it facilitates the communication of emotions and increases the users' empathy with the reviewer. The study is structured as follows: we first present the theoretical background, then we develop the conceptual framework and research propositions to explain how consumers process online reviews. Then we empirically test the model through a two-step process, an eye-tracking analysis and a fsQCA of 104 TripAdvisor users who were exposed to pictorial and textual content and completed a questionnaire. Finally, we discuss the findings, limitations, and opportunities for future research and summarize the implications for researchers and practitioners.

## **2. LITERATURE REVIEW**

### *2.1. The revised Stimulus-Organism-Response Model*

The S-O-R framework (Mehrabian & Russell, 1974) is grounded in environmental

psychology and provides the theoretical basis for the understanding of customer behavior. The theory states that a stimulus (S) influences people's internal affective evaluations (O), which, in turn, leads to approach or avoidance responses (R) (Floh & Madlberger, 2013). According to Jacoby (2002), the stimulus is the environment as encountered by the individual at a particular moment in time. Jacoby (2002; p.54) described the organism component as "prior experiences, knowledge, beliefs, attitudes, predispositions, intentions, values, cognitive networks, schema, scripts, motives, the individual's personality, feelings...". Customer response (R) is the final element of the S-O-R framework. Basically, this is the desire to enter or leave a particular environment, that is, approach or avoidance behavior (Vieira, 2013). Jacoby (2002) identified several problems with the initial conceptualization of the S-O-R model: (i) the failure to consider that certain constructs (for example responses) may be both organisms and responses (internal and external responses); (ii) the linear sequence S-O-R may blind researchers to important phenomena and dynamic relations; (iii) the linear sequence is not able to accommodate automatic processing. He thus proposed an advanced version of the S-O-R model where the constructs are depicted as overlapping circles that form a dynamic 7-sector Venn diagram (see Figure 1), which we briefly discuss in the following sections.

#### *Stimulus sector factors*

Sector 1 consists of the environmental stimulus as encountered by the individual at a particular moment in time. In line with the holistic conception of stimuli proposed by Jacoby (2002), we included as stimuli conflicting eWOM communications encountered by consumers as they searched for information about a restaurant. Previous research has shown that pictorial and textual features in advertisements capture consumers' visual attention (Pieters & Wedel, 2004). There is an open debate about whether consumers more easily remember images than words. Some studies have found that photographs in tourism websites

produce positive attitudes toward tourism products and, consequently, influence tourists' purchase intentions (e.g., Jun & Holland, 2011). The findings of these studies indicated that, in advertisements, photos elicit more positive attitudes toward products than textual information. Hernandez-Mendez and Muñoz-Leiva (2015) showed that tourists exposed to banners in online travel communities took longer and required higher prior fixations to notice the text than the image. Leung (2012) demonstrated that when a tourism company adds images to its Facebook page status posts, it doesn't always fare better than when only text is added. Specifically, Leung observed that tourists are more likely to book a service when the post content focuses on the product, supported by text, rather than when it is supported only by images. To provide deeper understanding of the impact of texts and pictures in online reviews on consumers' information processing, Sector 1 is conceptualized in this research as a bundle of interacting and competing stimuli (conflicting reviews about the same restaurant, combining text and pictorial content).

#### *Organism sector factors*

Multiple representations and processes are involved when individuals capture, decode and adaptively respond to a complex stimulus. In Sector 2 consumers subconsciously process incoming stimuli. Jacoby (2002) posited that exposure to stimuli (conflicting online reviews) leads to subconscious processing. Researchers examining attention have emphasized the critical role of working memory; its limited capacity leads individuals to competitively select from the different stimuli. This demonstrates the need for sensitivity control and the filtering of the elements that are likely to be behaviorally important (Knudsen, 2007).

There is rich literature on how sensory properties in the environment “capture” individuals' attention, both in stimuli-driven/exogeneous attention, bottom-up processing and in goal-directed, top-down, endogenous processing (Pieters & Wedel, 2004; Theeuwes, 1994; Yantis 2000; Chun & Wolfe 2001; Rayner, 1998). The nature of the stimulus, the task, and in



individual differences in the capacity to control attention, are critical factors for the endorsement of the above functions (Barrett, Tugade, and Engle, 2004).

Eye tracking has been extensively used as a tool for measuring visual attention (see Wedel & Pieters, 2014, for a review). This research uses eye tracking to measure how the specific visual and textual features of conflicting online reviews influence eye movement. Pieters and Wedel's (2004) conceptual model (AC-TEA) showed the superiority of pictorial elements in capturing attention, that text captures attention in direct proportion to the surface size of the area of text, and there are two attention transfer processes among ad elements (endogenous and exogenous).

The eye-mind hypothesis posited (Just & Carpenter, 1980) that there is no appreciable lag between what is being fixated on and what is being processed. Therefore, the time taken to process a newly fixated word is directly indicated by gaze duration, that is, what a person is looking at in the online review (title, text, picture, overall evaluation of the restaurant), which often indicates where the individual's thoughts lie, but not the evaluative direction of these thoughts or perceptions.

Sector 3 refers to "long-term memory", which includes all retained prior experiences used by the cognitive and emotional systems. Sector 5 indicates individuals' psychological reactions to a stimulus, which are difficult to trace. The present study focuses on Sector 4, which is the realm where consumers consciously process a new stimulus incoming from Sectors 1 and 2. Researchers have emphasized that attention and cognition have significantly different functions and constitute separate processes, as consciousness requires multiple functions in terms of summarizing information, detecting anomalies, directing emotions and having rational thoughts toward stimuli related to the organism's environment (Koch & Tsuchiya, 2007). Several studies have shown that attention operates at primitive perceptual stages, filtering information selectively for further processing (e.g. Knudsen, 2007).

The study includes active perceptions of credibility and the helpfulness of online reviews; argument quality (informativeness and helpfulness) and conscious consumer responses in terms of the pleasure and arousal emotions, empathy and trust in the restaurant generated by online reviews.

According to Eppler (2006), customers perceive online information quality as the extent to which the information given conforms to their expectations and meets their requirements for the particular activity in which they are engaged (e.g., a visit to a restaurant). Poor information quality may be distracting because it increases information search and processing costs. Previous research into online reviews analyzed argument quality as a construct with two dimensions, informativeness and persuasiveness (Zhang, Zhao, Cheung, & Lee, 2014). Informativeness refers to the consumers' overall perception of whether an online review provides complete, consistent, accurate, or adequate information, while persuasiveness represents consumers' perceptions of the degree of relevance of online reviews. High quality arguments are found to contribute to positive decision outcomes (Cheung & Tadani, 2012). The perceived helpfulness of a review is the extent to which a peer-generated evaluation is regarded by potential consumers as useful and valuable in their decision-making processes about a product/service (Yin, Bond & Zhang, 2014). The perceived credibility of eWOM reviews reflects the extent to which consumers perceive online reviews as believable, true, or factual. Previous studies have shown that perceived diagnosticity can alleviate information asymmetry and strengthen consumers' confidence in their purchase decisions (Kempf & Smith, 1998). If customers feel that an online review is diagnostic (helpful and credible), they are more confident about their purchase decisions.

Arousal and pleasure have been conceptualized as two dimensions of emotion (Russell, 1980). Mehrabian and Russell (1974, p.18) defined arousal as "the degree to which an individual feels excited, stimulated, alert, or active". Pleasantness is the hedonic valence

(pleasant or unpleasant) of an affective response to a stimulus (online review) that enables consumers to achieve their salient goal(s) (e.g., to find a good restaurant). There is empirical support in previous research that emotions have a positive impact on consumer behavioral intentions (Hume, 2008; Ruiz et al., 2018).

In addition, empathy with the reviewer is the extent to which readers find resonance with him/her (Xia & Bechwati, 2008) and how they would feel if they were in the situation described. The enthusiasm showed by a reviewer when describing the joys or problems of a particular restaurant experience can generate similar feelings in the minds of readers based on their own previous experiences. Empathy can affect consumer behavior indirectly by highlighting to the consumer the product/service benefits that other consumers have enjoyed; alternatively, empathy can affect consumers through direct emotional “contagion”, such as when one laughs at a funny review or feels disturbed by a distressing review (Ruiz et al., 2018).

Furthermore, trust has been defined as one party’s expectations about the other party’s motives and behaviors (Flavian, Guinaliu & Gurrea, 2006). In offline and online environments, it is generally agreed that three key aspects shape trust; honesty, benevolence and competence (Flavian et al., 2006; Ruiz et al., 2014). Honesty is understood to be the consumer’s perception that a restaurant fulfils its promises and commitments. Benevolence refers to the belief that the other party (restaurant) is concerned about achieving joint benefits with its clients. Competence refers to the belief that the restaurant has the experience and resources in its field of activity to do its work well and offer products. Even if trust traditionally acts as part of the consumers’ internal responses (Sector 6), which shift rapidly into sector 3 (experiential warehouse), in this study we recognize trust in its temporal form as part of sector 4 (conscious response at the moment the individual reads the online review), due to the respondent lacking previous experience with the restaurant.

Dual processing theories have been widely used to explain how individuals structure their active perceptions to process a stimulus in their working memory. The central principle is that there is interplay between automatic and controlled processing that determines individuals' behavior (Barrett, et al., 2004). In this vein, previous studies have recognized argument quality and helpfulness as more systematic route components as they involve more cognitive effort in their development (Zhang et al., 2014). Online review credibility and empathy are accepted as more heuristic elements that allow individuals to draw conclusions based on simpler rules concerning the nature of the entire task (Zhang et al., 2014; Tanford, & Kim, 2019). In addition, individuals' emotions play a critical role in how individuals interpret stimuli and form their final behavior (Ruiz et al., 2018). More importantly, the vast majority of these studies examined linear relationships among the above active perceptions, but the revised S-O-R model recognizes that complex and dynamic interrelationships occur which allow individuals to make decisions (Ruiz et al., 2018).

#### *Response sector factors*

Sector 7 contains those outcomes from Sector 4 that are directly visible to an observer, such as consumer behavioral intentions to perform a behavior (visit a restaurant).

Intentions have been shown to be good predictors of consumer behavior. Fishbein and Ajzen (1975) defined intention as a measure of the strength of one's intention to perform a specific behavior. As Ajzen (1991) pointed out, intentions are indicators of how hard people are willing to try to perform a behavior (Ajzen, 1991). Intentions, in this sense, capture motivational factors that influence behavior and comprise a commitment to behavior. Thus, intention to visit a restaurant belongs to the realm of sector 7 and is a reasonable indicator of future actual behavior.

Figure 1 demonstrates the rationale of the study based on the revised S-O-R model. The proposed model focuses on how inputs from the environment (conflicting online reviews) are

processed by consumers, both unconsciously and consciously (using their active perceptions and emotions), which, in turn, lead to consumer responses (behavioral intentions). Figure 1 shows the interrelationships among the study's main conditions and the configural nature of these routes.

Insert figure 1

## 2.2. Sequencing effects of online reviews

Consumers, when searching for information, typically face a multitude of messages, from various sources, that may give different and often inconsistent views of the same product or service. The vast majority of previous studies have examined consumers' attitude as a unidimensional evaluative process (from positive to negative), which is characterized by reciprocal control. In other words, consumers focus on an evaluative continuum in which any increase in one (positive) will lead simultaneously to a decrease in the other (negative). Cacioppo and Berntson (1994) provided evidence of the limited role of bipolar representation of attitudes in attitude and behaviour formation. They demonstrated that the formation of both positive and negative attitudes toward a particular object constitute separate functions with differential activation processes and distinguishable antecedents (Cacioppo and Berntson, 1994). Positivity offset and negativity bias are demonstrated during the formation of attitudes and behaviors (Cacioppo and Berntson, 1994; Sengupta and Johar, 2002). Information order influence the activation process, which takes place during consumers' evaluation formation and decision-making concerning online reviews (Kim & Lee, 2015; Ruiz et al., 2018; Purnawirawan, De Pelsmacker, & Dens, 2012). The primacy effect refers to the domination of the first item in a sequence over the other(s) (Haugtvedt and Wegener 1994), while the recency effect demonstrates a focus on recently imported information (Cohen 1981). Past studies in the online context have given mixed results concerning the dominant role of primacy (Drèze and Zufryden 2004; Ansari and Mela 2003), recency (Buda

and Zhang, 2000), and about both primacy and recency effects (Murphy, Hofacker, and Mizerski 2006). Researchers have argued that consumers are more willing to take part in exploratory behavior when positive online reviews appear first in the review sequence, probably due to an affect-effect (Lavine, Thomsen, Zanna, and Borgida, 1998). Sparks & Browning (2011) demonstrated that information (online hotel reviews) presented earlier in a sequence, especially if negatively worded, is likely to be more influential on consumer evaluations.

In addition, previous research (Kim & Lee, 2015; Ruiz et al., 2018) has shown that online review sequence modifies how different configurations of systematic and heuristic processing route elements contribute to produce high scores for consumer decision-making. Ruiz et al., (2018) showed that the contradictory sequencing of online reviews serves as a signal that enables consumers to detect whether a situation needs more cognition or not. When faced with positive–negative sequences, consumers either base their decision-making on strong positive emotions or they alter their concerns and base it on increased online credibility. With negative–positive sequences, consumers rely on information diagnosticity to increase their judgmental confidence.

Based on the above discussion we assume that the nature of the stimulus (sequence of reviews) modifies consumers' automatic processing and allows them to structure their active conscious perceptions and make their decisions. Hence, the study's research propositions are as follow:

*RPI(a). Consumers' automatic prioritization of positive online reviews and configurations of high scores in their conscious perceptions of online reviews lead to high scores in their intention to visit the restaurant*

*RPI(b). Consumers' automatic prioritization of negative online reviews and configuration of low scores in their conscious perceptions of online reviews lead to low scores in their*

*intention to visit the restaurant*

### 2.3 Sequence of reviews and pictorial content

The conceptual framework also integrates the interactions of the sequencing of reviews with pictorial content. The interaction between the sequencing of reviews and the use of pictorial content affects consumers' information processing and future intentions toward a reviewed restaurant (Manganari & Dimara, 2017). The picture superiority effect has been discussed by many researchers, especially in the message framing and persuasion domain (Nelson, Reed, and Walling, 1976; Seo, Dillard, and Shen, 2013), who have demonstrated that text accompanied with imagery tends to be more memorable than text alone. Images, therefore, following the rationale explained above, amplify the meaning of the message. The use of pictorial content is assumed to enhance positive or negative online reviews, as it facilitates the communication of emotion, increases perceived vividness, and enhances the user's empathy with the reviewer. Thus, the following is posited:

*RP2(a). Consumers' automatic prioritization of positive online reviews with photos and configurations of high scores in their conscious perceptions of online reviews lead to high scores in their intention to visit a restaurant*

*RP2(b). Consumers' automatic prioritization of negative online reviews with photos and configuration of low scores in their conscious perceptions of online reviews lead to low scores in their intention to visit a restaurant*

## **4. Method**

### *4.1 Research design*

This study investigates whether the sequencing and the presence of pictorial content in online restaurant reviews in TripAdvisor cause differences in terms of stimulus, organism, and response. A between-subjects experimental design of 2 (order of valence of 8 online reviews posted on TripAdvisor: positive-negative vs. negative-positive) X 2 (photo: yes vs. no) was

employed. The four scenarios were shown to participants randomly assigned to each scenario. The research consisted of a study session based on mixed methods, eye tracking and an online questionnaire, as depicted in Figure 2. The participants were exposed to the stimuli of each condition (positive/negative online reviews, positive/negative online reviews with positive photo; negative/positive online reviews, negative/positive online reviews with negative photo), as depicted in Figure 2. Their eye gaze was recorded and they afterwards completed a questionnaire.

Insert figure 2

For the eye tracking, the participants were first shown two slides of stimuli, one with four positive comments and one with four negative comments (left side of Figure 2). Then they were shown the same two groups of four comments with positive and negative photos of the restaurant (right side of Figure 2). Each slide was divided into AOIs (Areas of Interest) composed of: (i) the heading, (ii) the score (e.g., bubble ratings), (iii) and the text (reflecting the TripAdvisor layout). Thus, the two slides with just text had 12 AOIs, and the two slides with photos had 13 AOIs. The participants viewed the stimuli through a 1920 x 1080-pixel monitor. The Tobii Pro TX300 device was used to monitor eye movements and iMotions software (<https://imotions.com/guides/>) was used for the data recording. This records at 300 Hz and has a built-in 23-inch monitor. The following continuous measures were used: time spent, time to the first fixation, hit time, revisit count, and number of fixations.

The questionnaire was conducted online, after the experiment. It used 7-point Likert-type scales adopted from the literature for the constructs: (i) eWOM helpfulness,  $\alpha=.946$  (Yin et al., 2014); (ii) empathy with the reviewer (McCullough, et al. 1997); (iii) eWOM credibility (Cheung et al., 2012); (iv) argument quality of eWOM (i.e., informativeness and persuasiveness) (Zang et al., 2014); (v) behavioral intentions to visit the restaurant (Zang et al., 2014); and (vi) trust (Ruiz et al., 2014). The results had good Cronbach's *alpha* values for



each construct: eWOM informativeness ( $\alpha=.946$ ), empathy with the reviewer ( $\alpha=.841$ ), credibility ( $\alpha=.853$ ), argument quality ( $\alpha=.9203$ ), behavioral intention ( $\alpha=.932$ ), and trust ( $\alpha=.929$ ). A pretest of the questionnaire using the same scales and eWOM posts was conducted to refine the final details. Each scenario was tested with a minimum sample of 15, resulting in more than 60 participants.

#### *4.2 Stimuli*

An Italian restaurant was chosen as the study context because of their popularity. Comments posted on TripAdvisor were examined and an initial list was drawn up. To homogenize the reviews the researchers manipulated their length (i.e., 35-40 words) and content. Each comment mentioned the food, the service, and the price inferences, which are common study variables in this industry (ACSI, 2018). Two photos of a dish of pasta were selected, one appealing and one disgusting. This pictorial content was used because photos specifically presenting tourism features in advertisements evoke more positive mental images of an experience than abstract representations, and the former are more likely to elicit purchase intention (Jun & Holland, 2011). A star system was used to evaluate the restaurants, 5 stars being positive, 1 star being negative. To check the actual valence, a list of 5 positive and 5 negative comments were tested on students. The comment with the worst valence score was discarded, resulting in 4 comments for each scenario.

To determine whether the valence manipulation worked, the participants rated the valence of text and photos on a 7-point scale, ranging from 1 (very negative) to 7 (very positive). An analysis of variance was performed to assess the effects of the valence manipulation on the valence of the comments; this showed that participants in the negative condition rated the comments as more negative ( $M_{negative\ text} = 1.86$ ),  $F(37,58)$ ,  $p < .000$ ) than those in the positive condition ( $M_{positive\ text} = 5.56$ ).

#### *4.3 Sample and data collection*

The data were collected between March-April 2018 from a sample of 104 TripAdvisor users using eye tracking and a questionnaire. TripAdvisor is an online travel platform with a monthly worldwide average of 490 million visitors and 795 million ratings (TripAdvisor, 2019). Previous research on eWOM in tourism has focused mainly on hotels, tourist destinations and/or attractions, paying little attention to restaurants (Fang et al., 2016; Ruiz et al, 2018). Spain was chosen as a study context. Spain accounts for 12.7% of the EU-27 total value added of the food and beverage service activities (FBSA) sector (Cabiedes-Miragaya, 2017). Spain has the greatest density of bars per person in the world (1/174).

A specialist market research company recruited 104 subjects for the study; the sample reflected by age and gender the demographics of the city where the study took place. The participants were randomly assigned to the four scenarios. Due to incorrect data obtained from the eye tracking, only 99 participants were retained as a valid sample. The participants' visual attention was measured through eye-tracking and they completed a post-experimental questionnaire. The variables of the questionnaire were measured on 7- point Likert-type scales adapted from previous research. Table 1 shows the measurement of the variables.

#### TAKE IN TABLE 1

The sample profile was as follows: females 54.5%; 38.4% aged 25-30; 18.2% aged 31-40; 22.2% aged 41-50; and 21.2% aged 50-60,  $M_{age}$ : 37years. 51.5% were employed, 29.3% were students and 19.2% unemployed; 51.5% had used TripAdvisor more than 3 times in the previous three months. The recruitment procedure and the sample profile were representative of the population of the main urban area of Valencia (Spain), which has more than one million inhabitants. In this sense, 79% of the sample was between 25 to 50 years old that reflects the highest percentage of Internet shoppers in Spain.

#### *4.4. Data Analysis*

Data from the eye tracking were analyzed using iMotions software and statistically analyzed using SPSS for each metric and for the AOIs. Data from the questionnaire were analyzed using fsQCA (Woodside, 2016).

FsQCA builds upon the main tenets of complexity theory, namely: (a) causal complexity (a combination of conditions can lead to the outcome of interest); (b) equifinality (multiple combinations might lead to the outcome); and (c) asymmetry (the combinations that lead to high scores for the outcome of interest are not mirror opposites of those that lead to low scores) (Ragin 2008; Rihoux & Marx 2013). By using the set theoretic function of negation, the method can discern causal combinations (paths) in two states of the outcome of interest: high and low scores (asymmetry), and therefore is uniquely suited to the purposes of our study.

Following the direct method of calibration (Ragin, 1987; 2008), the most widely used (Chatzipanagiotou, Veloutsou & Christodoulides, 2016; Ruiz et al, 2018), we calibrated the data in each of the four studies by setting cases in the highest quintile equal to 0.95 membership, cases in the middle quintile at 0.50, and calibrated scores for the lowest quintile at 0.05. By following a systematic cross-case analysis, set-logic algorithms and functions, fsQCA detects all possible combinations of conditions which might lead to the outcome of interest (Ragin, 2008; Rihoux & Ragin, 2008). The present study incorporates two set-theoretic measurements, consistency and coverage, to assess the theoretical significance and empirical relevance of the results. In conventional statistical language, consistency and coverage measures correspond to the measure of correlation coefficient, and coefficient of determination, respectively (Woodside, 2013). While there are no strictly defined levels for acceptable consistency and coverage, researchers have agreed that consistency values lower than 0.75 should not be accepted (see Ragin 2008b: 118; Schneider & Wagemann 2007), while a derived solution is informative when coverage is above 0.25 (Woodside, 2013).

Based on Ragin's (2008) suggestions, we set .80 as the minimum acceptable level for consistency and included one case (due to the size of the samples) for further analysis. Furthermore, the present study uses *core and periphery* models, in accordance with the suggestions of Fiss (2011) and Ragin & Fiss (2008), to identify conditions, which have a strong relationship with the outcomes of interest (*core conditions*) and less critical conditions (*peripheral conditions*). In addition, alternative checks ensured the robustness of the results (Fiss, 2011; Skaaning, 2011). Two alternative tests were employed: (a) the different frequencies of cases (two cases to be included) and (b) the different levels of consistency in derived solutions (ranging from .81 to .90). However, the results did not provide substantively different interpretations.

## **5. Results**

Figure 3 depicts the percentage of time spent looking at each of the 12 AOIs on each slide, as follows; 8 posts, each with a heading (e.g. "Excellent Italian food"), the number of bubbles reflecting the overall evaluation, and the text of each post, 4 positive, and 4 negative.

Insert figure 3

Attention, measured through time spent looking at the AOIs, is proportional to the size of the stimuli, as expected. Our results show that the size of the AOIs capture the attention paid to online review elements almost automatically, even when the consumer is not actively searching for them (Wolfe 1998; Yantis & Jonides 1984). The results demonstrate that consumers follow a typical reading task attentive process. The participants spent more time understanding the text and follow a serial search task pattern (Rayner, 1998). Most attention is paid to text of the reviews (AOIs 3, 6, 9, and 12), much less to the headings of each post (AOIs 1, 4, 7, and 10) and least to the bubble ratings that give the overall assessment of the restaurant. More interestingly, the following findings were noted: (i) the visualization pattern of the posts is similar for each stimulus, regardless of the valence and order of the posts, as

attention time values are similar across stimuli; certainly, dispersion increased a little in AOI 12, the text of the bottom post; (ii) the four posts received similar attention, regardless of their valence, with a slightly decreasing effect from the first (AOIs 1-3), in comparison to the posts at the end of the lists (AOIs 10-12). As the experiment did not force the participants to read all the comments, it may be argued that the attention given to each post decreases slightly as a function of the order of the posts.

Insert figure 4

In the other condition (text and picture), depicted in Figure 4, where the participants were exposed to a picture, positive or negative, the results followed a similar pattern to the condition that contained only texts, except for the following: (i) the similarity of the visualization patterns is less than in the non-picture condition. It seems that the presence of a stimulus with a different layout (e.g., a picture) attracts attention and the attention given to the first post is lower than in the text-only condition. This finding suggests that stimuli have a dual impact on attention, one path showing that when the stimuli are similar, the gaze pattern is similar across stimuli and attention slightly decreases over stimuli order; the other path suggests that a different type of stimulus (i.e., a photo) changes the gaze pattern; (ii) the attention given to the texts is related to valence as positive comments capture similar attention regardless of the order, the case being similar for the negatives.

Insert figure 5

#### *Positive-Negative Sequence*

The heatmaps provide a better overview of the amount of participants' gaze points directed toward specific parts of the online reviews. They depict the attention paid in descending order, in the colors red, yellow and green, providing a visual interpretation of the AOIs that attract participants' attention.

Figure 5

*Figure 5 shows that consumers begin by focusing mainly on the first positive comment, continue with the second and, later, the reiteration of positive comments attracts less attention, as in the case of the final positive comment. This result supports the primacy effect (Sparks and Browning, 2011), that is, consumers infer that the argument quality of online reviews presented first is more likely to be helpful. The situation changes when the participants encounter the first negative comment, which captures their attention (20/22 participants and time spent: 3.2s). Following a top-down exploration pattern, they continue to read the second and the third negative comments, concentrating on the beginning of the narratives.*

*Insert table 2*

*As for the fsQCA analyses of the high scores in consumers' intention to visit the restaurant (see Table 2, panel A; scenario 1), the results showed one solution (overall consistency=.97; overall coverage=.44) which explained that for these respondents a combination of pleasure and their perceived credibility of the comments constituted core conditions, which, coupled with the perceived trust in the restaurant, and the informativeness and helpfulness of the reviews (in a peripheral role), made them decide to visit the specific restaurant, providing support to RP1(a). This result is consistent with the stimulus-organism-response model. Positive emotions and trust play an important role in determining consumer organismic and behavioral responses evoked by stimuli (online reviews). Trust has been found to stimulate customers' repurchase intentions and loyalty toward companies (Morgan & Hunt, 1994; Flavian et al., 2006; Ruiz et al., 2014). Previous research also demonstrates that consumer emotions evoked by online reviews influence postpurchase behaviour of tourism services (Bigne et al., 2019). The results further suggest (Table 2; panel B; scenario 1) that low pleasure and trust scores with these reviews will make the majority of the consumers unwilling to visit the restaurant (overall consistency=.90; overall coverage=.61), providing*

support to RP1(b). Therefore, individuals' trust and feelings about the restaurant influences their evaluation of their future experiences with the restaurant.

#### *Negative-positive sequence*

Figure 6 demonstrates that, in the opposite sequence, the participants followed a similar attention pattern. The participants did not go through all the negative comments; their attention waned as they proceeded. Negative comments at the top of the webpage attracted most of their attention, and they paid extra attention to the first part of each of these comments. Interestingly, consumers in this sequence focused on all the positive comments, which differs from the first scenario, with the probable aim of finding information that might allow them to counterbalance the negative comments. The results of the eye-tracking measures of participant arousal are relatively low for negative online reviews (4.4), and relatively high for positive online reviews (6).

The FsQCA results (see Table 2, panel A) demonstrated a solution which might explain high scores in consumers' intention to visit the restaurant, providing support to RP1(a). Consumers' high emotions and trust toward online reviews generated high scores in their intention to visit the restaurant (overall consistency=.86; overall coverage=.31). In regard to participants' low intention to visit the restaurant, the results demonstrated (see Table 2, panel B) that consumers are unwilling to visit the restaurant because it has low scores in pleasure and arousal, and lack of trust (in a peripheral role) toward the restaurant (overall consistency=.86; overall coverage=.53), providing support to RP1(b). Interestingly, in the case of positive intentions to visit the restaurant, trust is a core condition for individuals to accept the conflict while, in the case of consumers' low intentions to visit the restaurant, respondents' emotions play the core role.

Insert figure 6

In a nutshell, consumers are more willing to visit the restaurant in the case of a positive-negative review sequence (*primacy effect*) than in a negative-positive sequence. Consumers recognize conflicting reviews as representing a realistic and accurate situation, which appears to be helpful, informative and, thus, credible, which makes them willing to accept the conflict. In the opposite case (negative-positive), consumers seem to be more emotionally opposed to conflicting reviews (*primacy effect*) as fewer respondents decide to visit the restaurant in the future. Even if the positive reviews at the end may slightly attenuate the primacy effect, the scenario appears to be unpleasant (low pleasure) and have low arousal. Overall, the majority of the consumers will reject the conflicting reviews as they trigger stronger emotions of dislike and concerns about the restaurant that make them unwilling to deal with the conflict, providing support to the dominating role of *negativity bias*.

#### *Positive-Negative sequence with photos*

As figure 7 demonstrates, the first comment attracted the most attention (ratio:18/25), and the participants spent more time there (time spent:1.3s). Interestingly, the positive food photo captured significant visual attention (ratio:15/25), but only for a short time (time spent: 0.4s). The first and the second positive comments are the AOIs given the most attention. In regard to negative comments, consumers do not follow a top-down approach, rather their attention is transferred through a bottom-up approach due to the influence of the picture. They prioritize the second comment (ratio:15/25; time spent:0.7s); they look also at the first comment (ratio:14/25; time spent: 0.6s) and, very quickly, the title of the second comment (ratio:10/25; time spent: 0.2s). Interestingly, the negative photo constituted the fourth most viewed AOI, (ratio:12/25; time spent: 0.4s). The consumers' emotive activation was relatively low for positive online reviews with positive photos (4.9) and relatively high for negative online reviews with negative photos (6.1), demonstrating that negative reviews evoke stronger emotions.



Insert figure 7

The fsQCA results (see Table 2, Panel A; scenario 3) show a solution (overall consistency=.94; overall coverage=.57) that explains, through two different paths (1(a) and 1(b)), respondents' high scores in intention to visit the restaurant, supporting RP2(a). That is, conscious consumer responses in terms of empathy with the reviewer, and trust in the restaurant generated by online reviews, lead to a positive response (future intentions to visit the restaurant).

Three solutions explain consumers' low scores in intention to visit the restaurant (see Table 2; panel B; scenario 3), providing support to RP2(b). Solution 1 is the most empirically important (raw consistency=.95; raw coverage=.59 and unique coverage =.23) for explaining low scores in intention to visit the restaurant; it indicates that the majority of respondents, even if they found the online reviews stimulating (high arousal scores), decided not to visit the restaurant due to lack of trust in the establishment.

#### *Negative-Positive sequence with photos*

Figure 8 shows that the respondents gave greater attention to the first and second comments. Negative photos attracted their attention, but did not constitute the main AOIs. The negative comments generated doubts about the restaurant, which made the respondents pay more attention to the positive comments which followed.

Insert figure 8

Table 2 (panel A) shows two main solutions for scenario 4, each of which include two different modes, providing support to RP2(a). Solution 1(a), which is the most empirically important (raw consistency=.91; raw coverage=.30), shows that high empathy scores constitute a core condition which, in combination with high scores in online review informativeness, persuasiveness, helpfulness, credibility and trust in the restaurant (in a peripheral role), lead the consumer to decide to visit the restaurant. However, the

respondents' low pleasure scores, as well as the low perceived credibility and persuasiveness of these reviews, constitute core causes, which makes the majority of the respondents reluctant to visit the restaurant, providing support to RP2(b) (see Table 2; panel B; scenario 4).

In summary, consumers are more willing to visit the restaurant in the case of a positive-negative sequence with photos rather than the opposite case. Empathy constitutes a critical element in the positive evaluative paths; it makes consumers more willing to accept the risk of visiting the restaurant in the future. Negativity bias remains important in the positive-negative with photos sequence. Interestingly, in the negative-positive with photos sequence there was a significant attenuation of negativity. The positive photo at the end of the sequence appeared to significantly attenuate primacy effects, making consumers more willing to accept the risk of a potential visit to the restaurant, especially when consumers find something personally relevant in the reviews.

## **6. Conclusions**

### *Theoretical contributions*

To the best of our knowledge this is the first study that empirically examines the advanced version of the S-O-R model as proposed by Jacoby (2002), especially as regards conflicting online reviews. By synthesizing theories from different domains, the study provides fruitful insights into the complex and dynamic relationships underlying individual consumer behavior when processing eWOM. The study capitalizes on the idea of the bivariate evaluative space and provides a fine-grained understanding of consumers' behavior in conflicting online reviews. The findings significantly contribute to the online review order research stream (Kim & Lee, 2015; Ruiz et al., 2018; Purnawirawan et al., 2012) and the consequent primacy-recency effects debate (Drèze and Zufryden 2004; Ansari & Mela 2003; Buda and Zhang, 2000; Murphy et al., 2006). Primacy and recency effects are concomitant,

and have an impact to some extent while seeming to compete in conflicting information. In line with previous research, the study recognizes a primacy effect in consumers' positive evaluation formation, demonstrating the superior role of affect over cognition (Lavine et al., 1998). In addition, the findings highlight that heuristic routes underlie respondents' positive evaluations and form their decisions. Consumers' emotions, trust, credibility and empathy play a critical role in the positive evaluation activation process (Ruiz et al., 2018). In negative evaluation formation, a stronger recency effect (negative comments at the end) was observed during which a higher degree of perceived conflict occurs. In this case, the findings demonstrated an interplay between heuristic and systematic elements which highlight the critical role of negative emotions and lack of trust, credibility and persuasiveness in the negative evaluation activation process. The study sheds new light on positive and negative evaluation formation processes, demonstrating not only that they constitute separate functions but have distinguishable antecedents and differential activation processes.

In addition, the findings provide further support to the negativity bias, which appears to have dominated the consumers' intentions as the majority appear reluctant to visit the restaurant (Nazlan et al., 2018). However, even if this is true for text-based online reviews, a significant attenuation of negativity bias occurred when positive photos appeared last in the sequence.

These findings provide support to the importance of pictorial content in online reviews.

Another theoretical contribution of this study is that it extends the Pieters and Wedel (2004) conceptual model (AC-TEA) into the social media context. Both bottom-up (stimulus) and top-down (person process) approaches identified in the AC-TEA model are evidenced in consumer attention to social media content. In the absence of photos, and when the information search is goal-driven (e.g. looking for information about a restaurant in social media), users' attention is driven by their personal interests (top-down). This is because the size of the post is similar and no pictures are influencing. However, when pictorial content is

included, our findings demonstrated that the visual attention paid to online reviews measured by eye-gaze increases, either by increased viewing of the pictorial content, or at the expense of viewing the text. The latter reflects a bottom-up approach. These results are in line with Pieters and Wedel's (2004) findings on the attention transfer process. As expected, our findings show that where there are photos, greater attention is transferred to all the other online review elements, independent of their sizes.

In addition, the study addresses growing calls to focus on the idiosyncratic operationalization of dual-processing theories (Barrett, Tugade & Engle, 2004). The present study, unlike most eWOM research, accommodates these idiosyncrasies. By leveraging the advantages of fsQCA as the methodological bridge between case- and variable- based studies (Ragin, 2008; Woodside, 2013) and complementing the results with eye-tracking observations, the study significantly contributes to the examination of consumer behavior in the context of contradictory online reviews. Finally, the proposed model goes beyond the linear sequence of stimulus-organism-response to explain the complexity of the consumer's information processing of online reviews. Unlike most eWOM research, which use self-report measures of consumer information processing and general correlation associations, this study combines two methodological approaches (eye tracking and fsQCA) to provide a more holistic explanation of consumer behavior in the context of online reviews.

#### *Managerial implications*

The findings provide practical implications for managers, consumers and online review platform service providers. First, acknowledging the importance of online review content, managers should pay particular attention to encouraging consumers to write realistic, informative, and timely comments; this will increase the online reviews' argumentation quality and perceived helpfulness. Restaurant managers might post tips on how to write a helpful review and provide rewards for the review that attracts the highest number of votes as

more helpful or credible. Managers should also encourage consumers to highlight specific positive and negative aspects of the experience and avoid extreme reviews. They should encourage consumers to provide informative, accurate, detailed reviews of the restaurant, its customer service, food, atmosphere, whether it is family-friendly, if it welcomes groups, etc., and to post pictorial content. Second, managers should encourage consumers to write factual reviews vividly describing multiple aspects of their experience with the restaurant. For example, if the consumer visited a restaurant during off-peak hours, and received stellar service, (s)he should mention this in the review, because this will provide a more realistic expectation for a meal taken during off-peak hours than during the lunch rush. Managers should develop mechanisms to help consumers engage in conversations about the restaurant. Reviews will be more credible if their authors provide contact information so that other consumers can easily ask them more questions or share their experiences. They should discourage generic statements. Third, the emotions evoked by online reviews can be used by managers to shape more effective response strategies. When customers visit a restaurant, it is important that the management generate pleasant feelings to encourage them to post on TripAdvisor after the experience. Restaurants might promote greater consumer emotional connectivity by running face-to-face promotional events (e.g., free classes on how to make a pizza) that users are likely to enjoy and share in online reviews. Fourth, the findings suggest new contextual classifications of online reviews in terms of their completeness (inclusion of cues other than text), informativeness and credibility that will further encourage consumers to make more positive decisions. Consumers should be encouraged to focus on online reviews with photos (or other cues) as this will give them the opportunity to make less biased decisions. More importantly, pictorial content is essential as it significantly contributes to the attenuation of negativity bias and helps the consumer make more informed decisions. Photographs and videos will enliven the presentation of the restaurant's services and thus will

activate more positive customer decisions. Finally, restaurant managers should also reinforce consumer trust by making consumers aware that the company is honest (e.g. by including a section with general information about the restaurant), is concerned about them (e.g. meeting special customer requirements, such as providing non-gluten pizzas or high-chairs for babies) and ensure that is able to offer the quality service promised on social media (e.g. availability of all dishes/drinks on the menu and reliable service). The online review contextual factors identified in the paper can be used by managers to shape more effective response strategies. The managerial implications suggested in the study might help consumers write 'better reviews'. In consequence, other consumers might make more informed and, thus, better decisions.

#### *Limitations and future research lines*

This research has some limitations that open future research lines. First, the sample was taken from a specific geographical area and composed of users of a specific platform; thus, future studies should use a sample of users of other platforms and from a different area to generalize the results. Second, the study examines how consumers processed visual content using photos of only one specific feature of the restaurant (food). Recent research (Li et al., 2016) has highlighted that photo selection is critical because it may result in differing responses.

Therefore, we suggest that photos that capture the atmospherics of the restaurant (decor, furniture, etc.), and even videos, might be of research interest. Third, while the study includes price inferences, it does not focus on the individual impact of price on consumers' decisions. Therefore, future research might include price ranges posted on TripAdvisor as an additional eye-tracking AOI. In addition, the role eWOM in pricing strategy could also be very important; eWOM might decrease product price variability though mitigating information asymmetry. Fourth, critical elements of Sectors 3 and 5 of Jacoby's (2002) model are not included in this empirical study. Consumers' prior experiences, knowledge, predispositions

and individual characteristics (e.g., demographics) can significantly affect their information processing of online reviews. Therefore, future research must address the impact of these characteristics. Fifth, the study does not take into consideration reviewers' characteristics (e.g., demographics, expertise), which could also influence consumers' perceptions. Therefore, future research could examine the effects of these characteristics, especially concerning consumers' potential predispositions and online review credibility.

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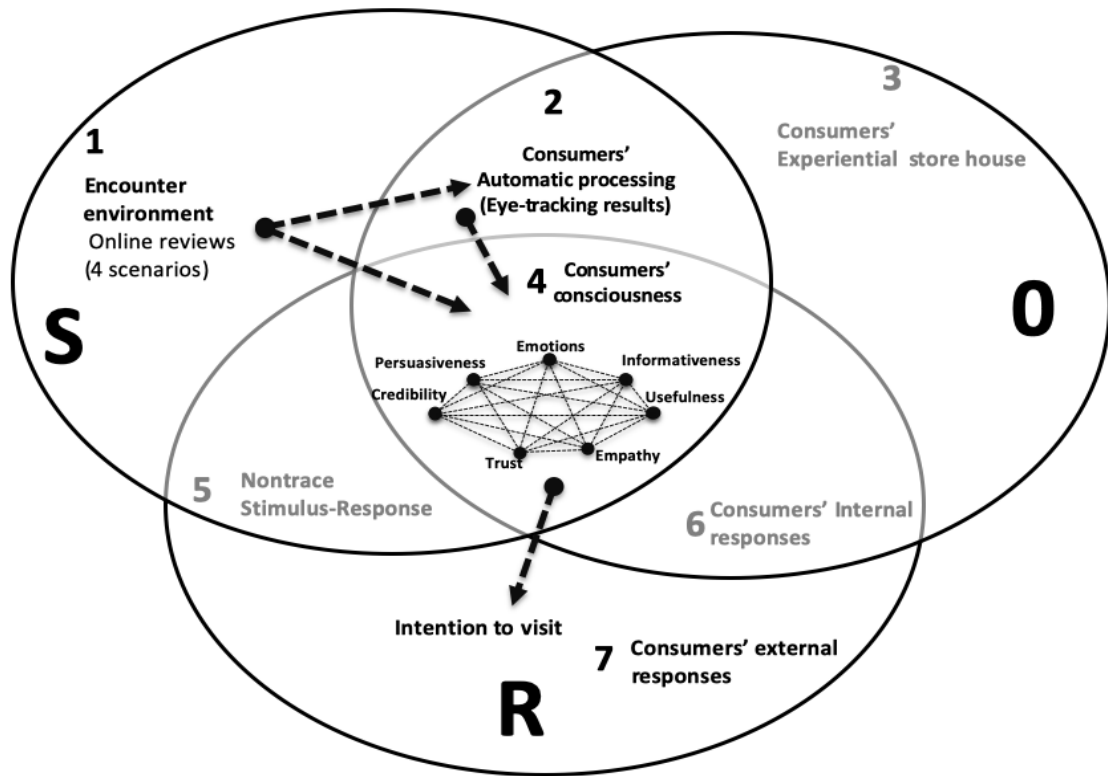
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Figure 1 Study's framework



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*Note: Sector 1= Encounter environment; Sector 2= Automatic Processing; Sector 3= Experiential Storehouse; Sector 4= Consciousness; Sector 5 = Nontrace stimulus-response events; Sector 6= Internal responses; Sector 7= External response*

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Figure 1. Study's conceptual framework based on Jacoby (2002)



Figure 2. Experimental design

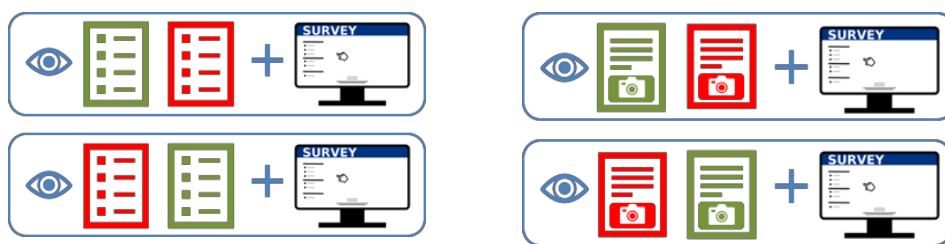


Figure 2. Experimental design

Figure 3. Attention to comments without photo

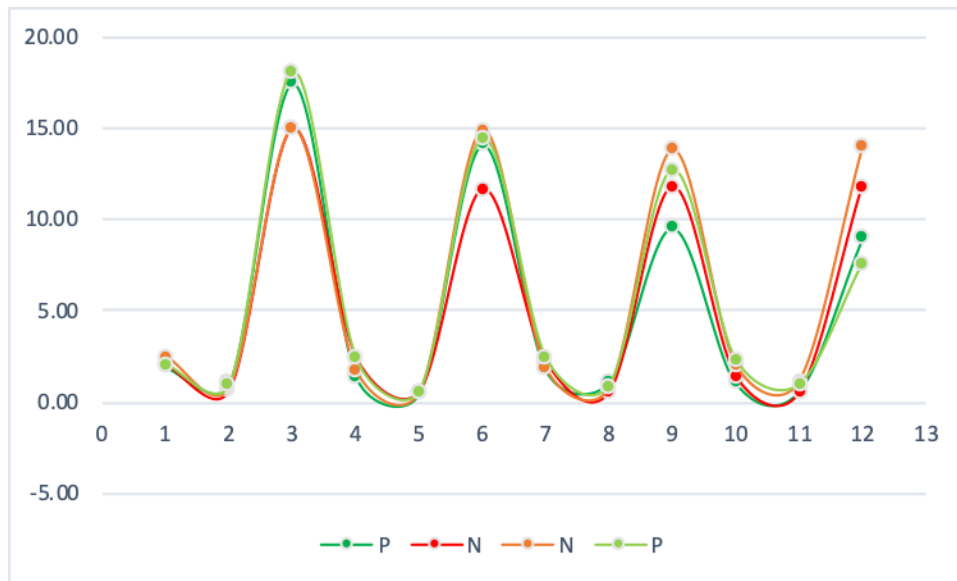


Figure 3. Attention to comments without photo measured through percentage of attention.

Figure 4. Attention to comments with photo

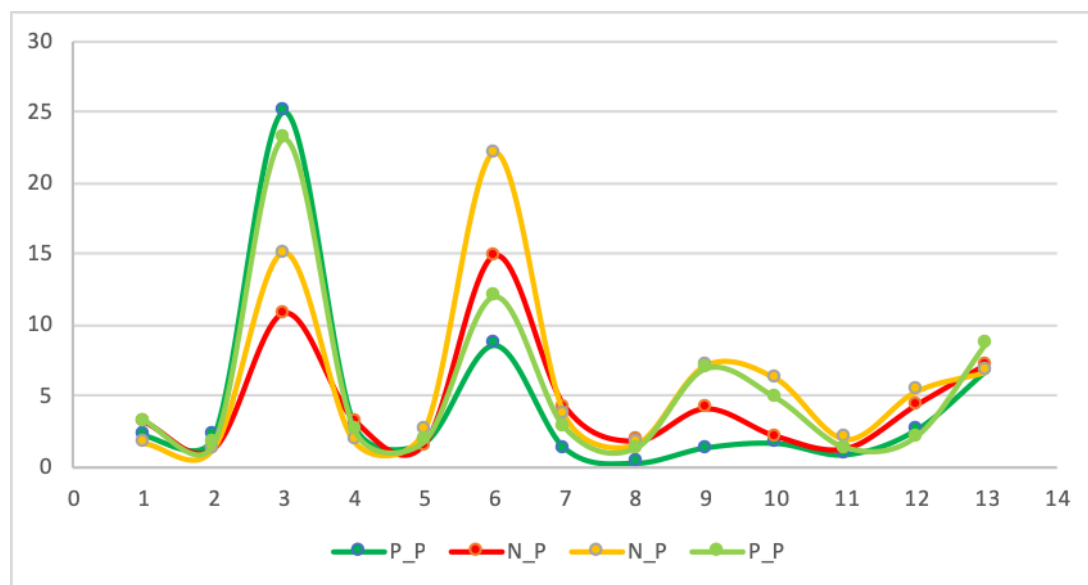


Figure 4. Attention to comments with photo measured through percentage of attention.

Figure 5. AOIs and Heatmaps scenario 1 (Positive-Negative)

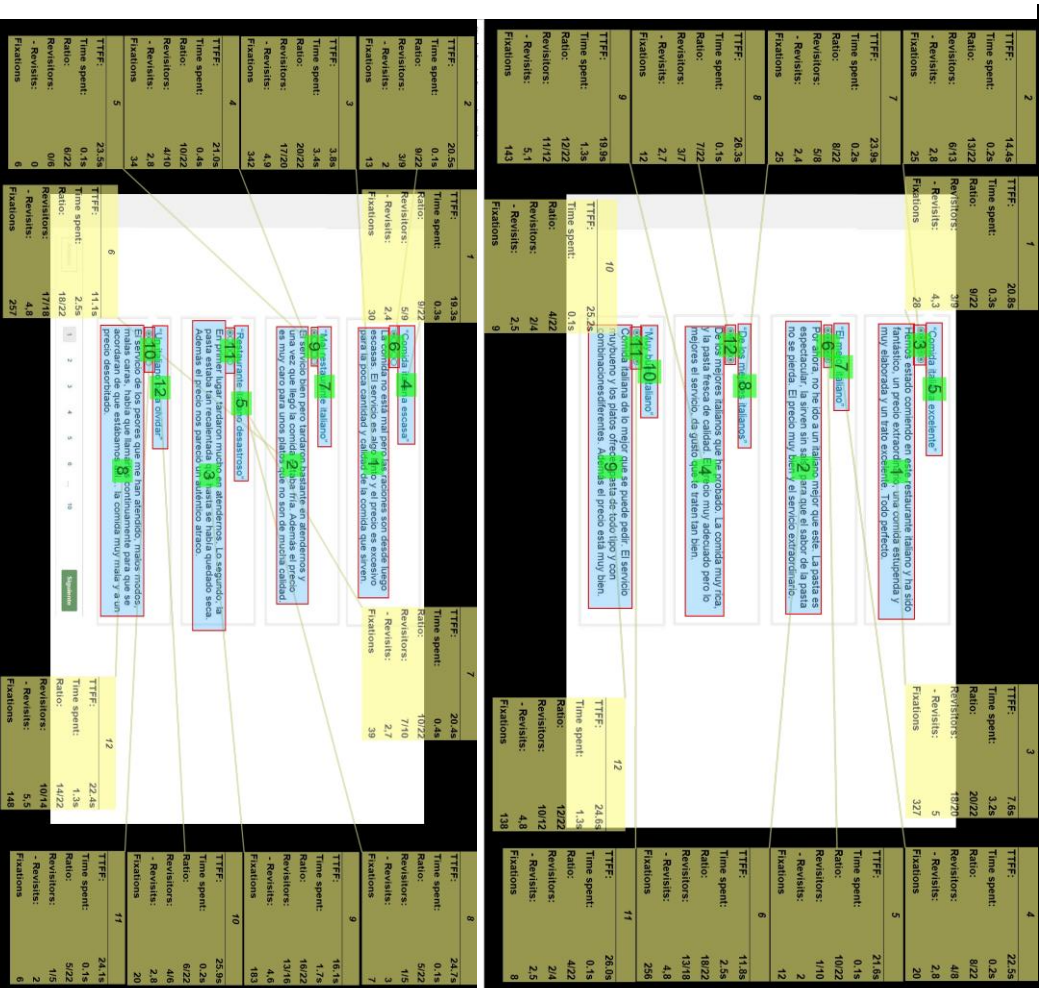


Figure 5. AOIs and Heatmaps of scenario 1 (Positive-Negative online reviews sequence)

Figure 6. Heatmaps of scenario 2 (Negative-Positive)

Negative reviews

Positive reviews



Figure 6. Heatmaps of scenario 2 (Negative-Positive online reviews sequence)

Figure 7. Heatmaps of scenario 3 (Positive-Negative with photo)

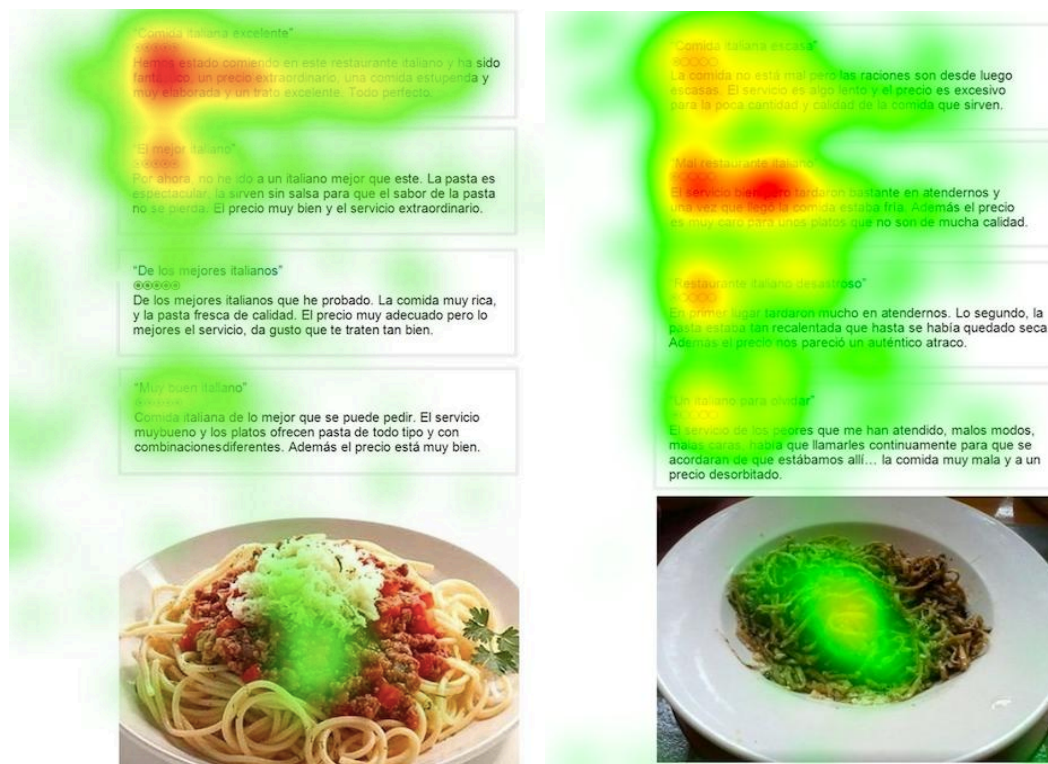


Figure 7. Heatmaps of scenario 3 (Positive-Negative with the inclusion of positive and negative photo respectively)

Figure 8. Heatmaps of scenario 4 (Negative-Positive with photo)

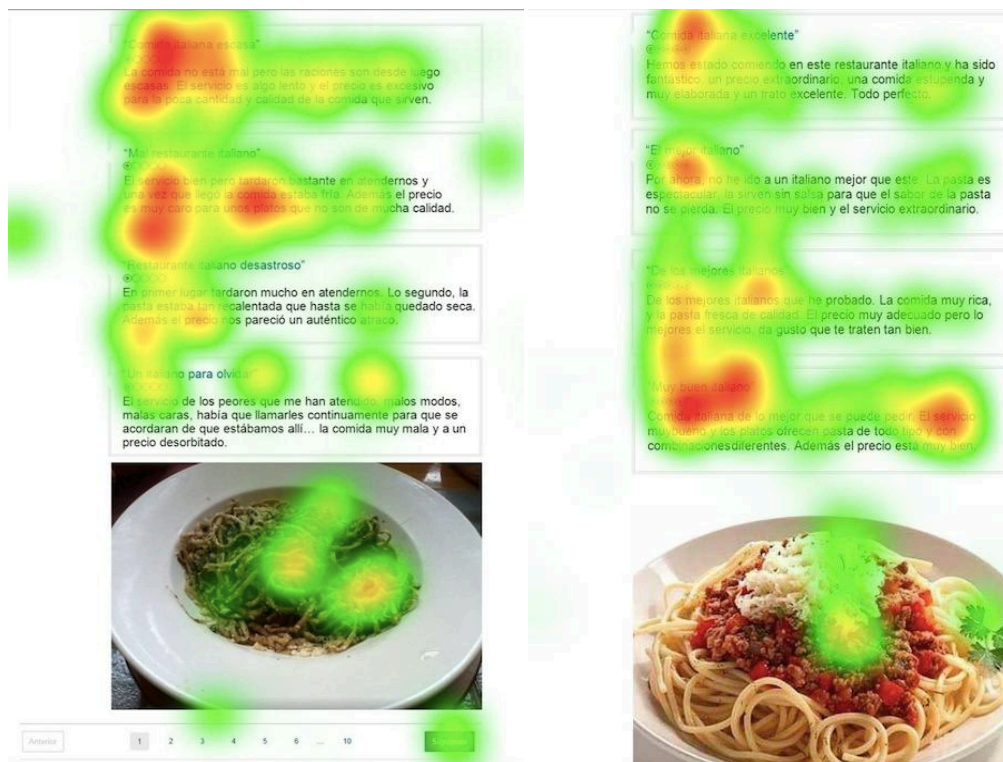


Figure 8. Heatmaps of scenario 4 (Negative-Positive with the inclusion of negative and positive photo respectively)

**Table 1. Study measures**

<b>Variable</b>	<b>Items</b>	<b>Source</b>
Online review credibility	I think these reviews are factual I think these reviews are accurate I think these reviews are credible	Cheung et al. (2012)
Online review informativeness	These reviews provide relevant information about the restaurant These reviews provide complete information about the restaurant These reviews provide timely information about the restaurant	Zang et al., (2014)
Online review persuasiveness	The arguments of these reviews are convincing The arguments of these reviews are persuasive The arguments of these reviews are good The arguments of these reviews are strong	
Online review helpfulness	Using the scales below, how would you describe the above consumer reviews? – not at all helpful/very helpful – not at all useful/very useful – not at all informative/very informative	Yin et al., (2014)
Empathy	-While reading this review, to what extent did you feel like you were experiencing the same emotions as the reviewer? – While reading this review, to what extent did you feel concerned for the reviewer? – While reading this review, to what extent did you feel moved by the review?	McCullough, et al., (1997)
Emotions	PLEA1 Angry-content PLEA2 Unhappy-happy PLEA3 Displeased-pleased PLEA4 Sad-joyful PLEA5 Disappointed-delighted PLEA6 Bored-entertained AROU1 Depressed-cheerful AROU2 Calm-enthusiastic AROU3 Passive-active AROU4 Indifferent-surprised AROU5 Quiet-anxious AROU6 Relaxed-nervous	Russell (1980)
Trust	I trust this restaurant I think this restaurant is reliable I think this restaurant is honest with its customers	Ruiz et al., (2014)
Behavioral intention	I am very likely to have lunch at Restaurant XYZ I intend to have lunch at Restaurant XYZ I would seriously contemplate having a meal at restaurant XYZ It is likely that I am going to have a meal at restaurant XYZ	Zhang et al., (2014)

Table 1. Study measures



**Table 2. Fs/QCA results**

	Scenario 1	Scenario 2	Scenario 3		Scenario 4			
A. Output variable: High scores in Intention to visit								
Conditions tested:	(1)	(1)	(1a)	(1b)	(1a)	(1b)	(2a)	(2b)
Helpfulness	●			●	●	●	●	●
Empathy			●	●	●	●	●	●
Informativeness	●				●	●	●	●
Credibility	●			●	●		●	
Persuasiveness				●	●	●	●	
Trust	●	●	●	●	●		●	●
Pleasure	●	●		●		●	●	●
Arousal		●	●				●	●
Raw Coverage	.44	.31	.45	.34	.30	.18	.15	.20
Unique Coverage	.44	.31	.22	.12	.15	.03	.03	.08
Consistency	.97	.86	.92	.92	.91	.80	.85	.82
Overall Consistency	.97	.86	.94		.88			
Overall Coverage	.44	.31	.57		.46			
B. Output variable: Low scores in Intention to visit								
Conditions tested:	(1)	(1)	(1)	(2)	(3)	(1)		
Helpfulness				●	●	⊗		
Empathy						⊗		
Informativeness				●	●			
Credibility						⊗		
Persuasiveness						⊗		
Trust	⊗	⊗	⊗	⊗	⊗	⊗		
Pleasure	⊗	⊗			⊗	⊗		
Arousal		⊗	●					
Raw Coverage	.61	.53	.59	.37	.21	.45		
Unique Coverage	.61	.53	.23	.00	.09	.45		
Consistency	.90	.86	.95	.83	.80	.92		
Overall Consistency	.90	.86	.84		.92			
Overall Coverage	.61	.53	.71		.45			

*Note: The black circles indicate high scores of a particular condition, and circles with "x" indicate low scores. The large circles indicate core conditions; the small circles indicate peripheral conditions. Blank spaces in a pathway indicate "don't care." The analysis of necessary conditions (NC) does not confirm the existence of any NC.*

**Table 2. Fs/QCA results**