

How Positive Do Testimonials on a Restaurant Website Need to Be? Impact of Positivity of Testimonial Reviews on Customers' Decision-Making

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1 **How Positive Do Testimonials on a Restaurant Website Need to Be? Impact of Positivity** 2 **of Testimonial Reviews on Customers' Decision-Making**

3 **Abstract**

4 This research aims to examine the impact of the positivity of testimonial reviews on
5 customers' decision-making to address conflicting views about testimonial review strategy of
6 a hospitality business: The business needs to display (i) moderately positive reviews to
7 decrease potential customers' skepticism or (ii) extremely positive ones to provide them with
8 a push. With a mixed-method approach, this research compares the effects of moderately
9 positive reviews on customers' perceptions toward the reviews and the restaurants with those
10 of extremely positive ones. The results show that extremely positive reviews are a more
11 strategic choice for testimonial review strategy, indicating that a hospitality business needs to
12 focus on showcasing its strength through testimonial reviews. This research contributes to the
13 literature on online reviews by discussing the unexplored usage of the reviews, thereby
14 confirming that the unique nature of testimonial reviews needs to be considered to explain
15 their impact on customers' decision-making.

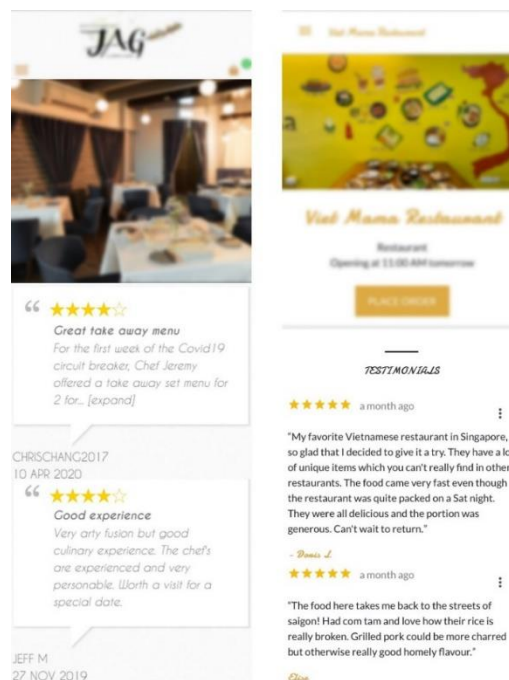
16 *Keywords:* Testimonial online review, review positivity, local search, attribution theory,
17 regulatory focus theory

18 **1. Introduction**

19 Imagine that you are looking for a restaurant during the trip. Through a smartphone,
20 you open the Google Maps application and search for "restaurants near me", called a local
21 search. While looking up some nearby options, one restaurant catches your attention. You
22 scan the restaurant's general information (e.g., distance from your current location, price
23 range, menu) and check its online reviews. It seems to be the right choice. As a final check,
24 you visit its website. The first thing you see is a few 5-star reviews displayed on the main
25 page. How do these testimonial reviews affect your choice? Will the glowing reviews become

26 the final push that you seek out? Or will they become the biased information that you pass
27 over?

28 As exemplified above, many hospitality businesses display positive online reviews on
29 their websites as testimonials to boost potential customers' confidence and convert them into
30 actual visitors (Chen et al., 2020). About 70% of hospitality businesses display testimonial
31 reviews on their websites, and 98% of them plan to keep the testimonial review strategy
32 (Bazaarvoice, 2019). When using the testimonial review strategy, hospitality businesses need
33 to deliberate which reviews they should display. In particular, hospitality businesses have to
34 consider how positive the reviews they display on their websites should be. On the one hand,
35 moderately positive reviews (e.g., 4-star ones) are encouraged because too positive ones
36 could make potential customers skeptical about the testimonials and even the business (see
37 the left side of Figure 1) (Cho et al., 2021). On the other, it is suggested that extremely
38 positive reviews can be a more strategic choice (e.g., 5-star ones) because 4-star reviews
39 might lead potential customers to ask why 1-star is missing (see the right side of Figure 1)
40 (Bassig, 2020).



41

42

Figure 1. Testimonial reviews displayed on restaurant websites

43 The conflicting views on the testimonial review strategy leave hospitality businesses
44 with a dilemma in deciding how to optimize the presentation of their testimonial reviews.
45 Given the prevalence of the testimonial review strategy in the hospitality industry
46 (Bazaarvoice, 2019), it is imperative to examine how extremely and moderately positive
47 testimonial reviews affect customers' decision-making to yield the best outcomes of the
48 strategy. Although many hospitality studies have been conducted to examine the impact of
49 positivity of online reviews on customers' decision-making (Hernández-Ortega, 2020; Lopes
50 et al., 2022; Roh & Yang, 2021; Woolley & Sharif, 2021), most existing literature have
51 focused on the reviews communicated via online review communities (ORCs) and online
52 travel agencies (OTAs) (Hu & Yang, 2021). It remains unclear how effective positive
53 reviews are when communicated through a business official website as testimonials.

54 Thus, this research aims to address the gap in the literature by examining the impact
55 of review positivity on customers' decision-making with testimonial reviews displayed on a
56 business official website. Focusing on two conflicting views on the testimonial review
57 strategy, this research answers the following research question: *Does a hospitality business
58 need to display moderately positive reviews to decrease potential customers' skepticism
59 toward the business, or extremely positive ones to provide the customers with a final push?*
60 After explaining two conflicting views on the testimonial review strategy based on the
61 attribution theory and regulatory focus theory, we examine the effect of the positivity of
62 testimonial reviews on customers' review perception, as well as their attitude toward and
63 intention to visit a hospitality business through a mixed-method approach.

64 **2. Literature Review**

65 An online review is a positive or negative evaluation made by former customers about
66 a product, which is shared via different online platforms (Hennig-Thurau et al., 2004). A
67 review enables customers to be aware of a product and, thus, is an essential source of

68 information for their decision-making (Mudambi & Schuff, 2010). The importance of
69 reviews has been particularly recognized when customers are dealing with a hospitality
70 product because its intangibility leads them to feel higher uncertainty regarding its quality
71 (Liu & Park, 2015). About eight out of ten customers always read reviews to select a
72 restaurant (Carter, 2022), and 95% of travelers do not make accommodation bookings
73 without reading a review (Georgiev, 2022).

74 Online reviews are available on a variety of online platforms (Kattiyapornpong et al.,
75 2021). While previous studies in the hospitality field have focused on ORCs and OTAs (Hu
76 & Yang, 2021), reviews are communicated through social networking platforms (e.g.,
77 Facebook) (Yost et al., 2021), media-sharing platforms (e.g., Instagram) (Yu, 2020), and
78 search engines (e.g., Google) (Kalnaovakul & Promsivapallop, 2021). Although the format
79 and layout of a review vary by platform, its role in customers' decision-making has been
80 discussed based on the same assumption: An online review is a company-independent source
81 of information (Litvin et al., 2008).

82 However, the assumption may not be valid when an online review is communicated
83 through a hospitality business's website. Many hospitality businesses display reviews on their
84 websites as testimonials to help potential customers reduce the uncertainty and to advertise
85 themselves using previous customers' praise (Chen et al., 2020). Similar to the reviews of
86 ORCs and OTAs, testimonial reviews are company-independent sources of information per
87 se, which are written and shared by previous customers without commercial interest (Lacroix
88 et al., 2018). However, unlike the reviews of ORCs and OTAs, testimonial reviews would be
89 controlled by businesses in that restaurants or hotels decide which reviews to display on their
90 websites (Holden et al., 2021). In other words, testimonial reviews have characteristics of
91 both electronic word-of-mouth (eWOM) and advertisements, and thus, they are called

92 company-controlled sources of eWOM or customer-generated sources of advertisement
93 (Nasiruddin et al., 2016).

94 Customers might have different expectations toward testimonial reviews depending
95 on which characteristics they consider (Kavanagh, 2019). If the characteristics of eWOM are
96 considered, customers want to read honest evaluations of previous visitors through
97 testimonial reviews. In this case, hospitality businesses should add a sense of authenticity
98 when choosing testimonial reviews, avoiding displaying too positive reviews (Chen et al.,
99 2020). However, when the characteristics as advertisements are considered, customers would
100 expect testimonial reviews to showcase the positive sides of a business. In this case, the
101 business does not need to lead the customer to have a second thought by displaying
102 moderately positive reviews (Bassig, 2020). As such, the dual nature of testimonial reviews
103 leads two conflicting views to emerge regarding how positive the reviews should be that
104 hospitality businesses display on their websites.

105 *2.1. Attribution Theory: Testimonial Reviews Should be Extremely Positive*

106 On the one hand, it is proposed that moderately positive reviews would be a better choice
107 because customers know that hospitality businesses decide which reviews to display on their
108 websites (Chen et al., 2020). Due to their biased nature, testimonial reviews are perceived as
109 less reliable compared to the reviews of ORCs or social media (Meuter et al., 2013). Given
110 this skepticism, extremely positive reviews might lead customers to perceive hospitality
111 businesses' greater control, which in turn, further increase customers' skepticism toward the
112 reviews as well as the business (Sullivan et al., 2018). According to this view, hospitality
113 businesses should avoid displaying extremely positive reviews on their websites.

114 This view can be supported by the attribution theory (Kelley, 1973). According to this
115 theory, when reading a review, customers are less likely to adopt it in their decision-making
116 if they perceive its evaluation is based on the reviewer's personal reasons (Ismagilova et al.,

117 2020). Also, the theory argues that customers tend to attribute extremely positive reviews to
118 the reviewers' personal reasons, indicating their lower effects on customers' decision-making
119 (Laczniak et al., 2001; Sen & Lerman, 2007). Mudambi and Schuff (2010) examined that
120 extremely positive reviews are perceived as less helpful than moderately positive ones
121 because of the higher subjectivity embedded in the former. The lower effects of extremely
122 positive reviews compared to moderately positive ones have also been examined in the
123 restaurant context (Racherla & Friske, 2012). Maslowska et al. (2017) found that the sales of
124 products with 5-star ratings are lower than those of products with 4.2- to 4.5-star ratings.

125 *2.2. Regulatory Focus Theory: Testimonial Reviews Should be Moderately Positive*

126 On the other hand, another view considers extremely positive reviews as a strategic
127 choice. Customers tend to have a certain degree of interest when visiting a business website
128 and make a final decision based on the visit: about 80% of diners check a restaurant's website
129 before choosing to visit or not (Kelso, 2019). In such a situation, hospitality businesses need
130 to assure the website visitors that they are making the right choice (Calkins, 2019). In other
131 words, hospitality businesses need to provide customers with the final push, such as glowing
132 testimonial reviews, so that they can feel confident about their decision (Bassig, 2020).
133 Different from the former view, this argues that hospitality businesses display extremely
134 positive reviews on their websites.

135 For this view, the regulatory focus theory can provide theoretical support (Higgins,
136 1997). When customers focus on their ideal goals (i.e., wishes and hopes, e.g., "this
137 restaurant will give you a satisfying experience"), the promotion-focused customers give
138 higher weights to positively valenced information that fits with their regulatory focus (Aaker
139 & Lee, 2001; Idson et al., 2000). In the context of online reviews, promotion-focused
140 customers regard positive reviews as more credible, and thus, their decision-making is more
141 strongly affected by the reviews with higher ratings (Lee & Koo, 2012). By collecting

142 restaurant reviews from Yelp, Pentina et al. (2018) found that promotion-focused customers
143 consider extremely positive reviews (i.e., positive reviews describing only positive attributes
144 about a restaurant) as more helpful and credible than moderately positive ones (i.e., positive
145 reviews describing both positive and negative attributes).

146 These two conflicting views make it difficult for hospitality businesses to determine
147 how positive reviews need to be leveraged as testimonials to get the expected outcomes.
148 Although a testimonial review strategy has been prevalent in the hospitality field
149 (Bazaarvoice, 2019), the conflict has not received much attention. If the conflict is not
150 addressed, hospitality businesses would continue to implement the testimonial review
151 strategy without a basic understanding of which reviews to be used for the strategy. Also, the
152 lack of attention on the conflict might cause future studies to overlook the important factor to
153 be considered to explain the impact of review positivity on customers' decision-making (i.e.,
154 a type of online platform where online reviews are communicated). Thus, this research aims
155 to address the conflicting views on the testimonial review strategy by examining the effect of
156 the positivity of testimonial reviews on customers' decision-making.

157 **3. Methodology**

158 The objective of this research is to examine the effect of the positivity of testimonial
159 reviews on customers' decision-making regarding the choice of a hospitality business to visit.
160 In order to achieve the research objectives, this research focused on the restaurant domain as
161 it has been one of the business domains in which the testimonial review strategy has been
162 prevalently adopted (Bazaarvoice, 2019). Thus, the context of this research was focused on
163 customers' choice of a restaurant during a local search (i.e., searching for "restaurants near
164 me" via smartphones). Specifically, a local search situation was selected because people tend
165 to visit a business website as a final step in deciding whether to visit or not during the
166 situation: when interested in a specific business during a local search, about half of

167 consumers visit its website as a final check to consolidate their choice (Murphy, 2020). Thus,
168 which testimonial reviews are shown to potential customers becomes more consequential in a
169 local search situation.

170 As the study site, this research selected Hong Kong SAR as it is one of the most
171 popular destinations for food and one of the top cities where restaurant receipts (Yeo, 2021).
172 Hong Kong has at least one restaurant for every 600 people, indicating that there are a
173 number of restaurant options for travelers (Li et al., 2017). Furthermore, the number of
174 restaurants in Hong Kong has increased from 2019 to 2021, showing that there are even more
175 options for travelers (Dale, 2022). As there are a number of dining options for travelers, many
176 travelers tend to rely on a local search (Crabtree, 2021). Thus, Hong Kong would be
177 appropriate for the study site.

178 This research adopts a mixed-method approach combining online secondary data
179 modeling and an experimental design. Considering that triangulation from different methods
180 and data sources improves the validity and reliability of a study, the findings of this research
181 are more valid and robust compared to those of previous research utilizing a single method or
182 data source (Meijer et al., 2002).

183 **4. Study 1**

184 In Study 1, we tested whether extremely and moderately positive reviews are
185 differently perceived or not. To discuss the different effects of testimonial reviews on
186 customers' decision-making by their positivity, it is necessary to confirm, first, that extremely
187 and moderately positive reviews are differently perceived. To test such a necessary condition
188 for comparing extremely and moderately testimonial reviews, Study 1 examined the effect of
189 positivity of online reviews on customers' review perception by adopting online secondary
190 data modeling. After collecting real online reviews from TripAdvisor, we compared review

191 readers' perception of extremely positive reviews (i.e., 5-star restaurant reviews) and that of
192 moderately positive ones (i.e., 4-star restaurant reviews).

193 *4.1. Data Collection*

194 We collected restaurant reviews from one of the popular ORCs, TripAdvisor. Out of
195 16,809 restaurants registered with the Hong Kong government (DATA.GOV.HK, 2021), over
196 80% (13,940 restaurants) were searched on TripAdvisor, and all the English reviews were
197 collected from the searched properties (197,412 reviews). The data collection was conducted
198 using Web-scraping software (i.e., WebHarvy) from November 17 to December 9, 2021. All
199 the online reviews posted from November 18, 2007 to November 17, 2021 were collected.
200 Given the unique situation, the online reviews posted after the outbreak of COVID-19 were
201 removed. Thus, 11,931 reviews were removed, which were posted after March, 2020 when a
202 global pandemic was declared. Among the remaining reviews, 4- (59,824 reviews) and 5-star
203 reviews (81,099 reviews) were selected, which are moderately and extremely positive
204 reviews, respectively (Qiu et al., 2012). Additionally, the reviews of fewer than ten words
205 (240 reviews) were removed because they were too short (Lee & Ko, 2022). Lastly, the
206 reviews of the large residuals or high leverage, namely outliers, were screened because they
207 could distort the accuracy of the analysis (Anscombe, 1960). The outliers were removed with
208 the Cook's distance method, which calculates Cook's distance of every data point (i.e., an
209 online review in this research) based on its residual and leverage: The higher the residuals
210 and leverage are, the higher the Cook's distance is (Cook, 1977). Following the rule of
211 thumb, we removed all the online reviews with the Cook's distance over $4 / n$ (n = the total
212 number of data points) (Bollen & Jackman, 1985). In total, 6,577 outliers were identified and
213 removed (4-star reviews: 3,021; 5-star reviews: 3,556). In conclusion, 134,106 reviews were
214 used for further analysis.

215 4.2. *Measures*

216 As the dependent variable, the perceived helpfulness of an online review (review
217 helpfulness hereafter) was used to represent customers' review perception, which refers to the
218 degree to which customers perceive a review as helpful for their decision-making.
219 TripAdvisor has a peer voting system that enables review readers to cast a vote for reviews
220 they find helpful. Many online review studies have used the number of helpful votes that each
221 review has received to measure its helpfulness (Kashyap et al., 2022). We used the number of
222 helpful votes for a review as a measure of the dependent variable.

223 The positivity of an online review (review positivity hereafter), the independent
224 variable, was measured by its rating and text sentiment. Thus, two independent variables
225 were used. As for review rating, it ranges from four to five because, as mentioned above, this
226 study targeted moderately and extremely positive reviews. As for review text sentiment, it
227 was measured by one of the widely used text-analysis programs, Linguistic Inquiry Word
228 Count (LIWC) (Boyd et al., 2022). LIWC shows the sentiment of a given text with a
229 sentiment score, ranging from 0 (negative) to 100 (positive), by calculating the percentage of
230 sentiment words written in the text, which are defined by the program.

231 Regarding control variables, a range of components of an online review was adopted,
232 which have been examined as having significant effects on review helpfulness: the number of
233 reviews a reviewer has written (reviewer experience hereafter) (Cheng & Ho, 2015), the
234 number of helpful votes a reviewer has received (reviewer expertise hereafter) (Lee et al.,
235 2017), the number of days elapsed since the upload date of a review (review age hereafter)
236 (Kim et al., 2022), the type of device used for uploading a review (i.e., 0 = uploaded by a
237 desktop; 1 = uploaded by a mobile) (review device hereafter) (Mariani et al., 2019), the
238 number of photos embedded in a review (review photos hereafter) (Li et al., 2022), the
239 number of words written in the review text (review length hereafter) (Aghakhani et al., 2021),

240 and the readability of review text (review readability hereafter) (Leung, 2021). Gunning's fog
241 index was used to calculate review readability, indicating the educational grade level readers
242 need to understand a certain text (6 = easy to read, 17 = hard to read) (Gunning, 1952).

243 *4.3. Analysis*

244 A regression analysis was used to examine the effect of review positivity on its
245 helpfulness. We used the Tobit model because of the specific features of our dependent
246 variable. On the one hand, the number of helpful votes is usually bounded in its range and has
247 a right-skewed distribution because most reviews have zero or one vote (Liu & Park, 2015).
248 These tendencies were also observed in our dataset: 71.8% of reviews received a single vote,
249 and the skewness of review helpfulness was 1.45. On the other hand, the number of helpful
250 votes has a potential selection bias because it is challenging to identify how many readers
251 read a specific review on TripAdvisor, and more importantly, not every reader casts a vote on
252 a review. When the sample is expected to be censored and have potential selection bias, the
253 Tobit model has been selected as the proper regression model (Long, 1997). Therefore, we
254 adopted the Tobit model for the regression analysis. We included the restaurant fixed effect
255 in the regression model to control the unobserved restaurants' characteristics that are not
256 included in the model (e.g., location, price range, facility, or other attributes). Also, the time
257 fixed effect was included in the model to control for time trends and seasonality. As a robust
258 check, we replicated the regression analysis after log-transforming the data.

259 *4.4. Results*

260 Table 1 provides the descriptive statistics for the variables of the dataset.

261 Table 1. Descriptive statistics

Variable	Min	Max	Mean	Std.
Review helpfulness	0	3	0.41	0.62
Review positivity 1 (rating)	4	5	4.58	0.49
Review positivity 2 (text sentiment)	1	99	88.94	19.69
Reviewer experience	1	9,501	154.62	504.87
Reviewer expertise	0	24,506	116.90	1175.64
Review age	649	5,121	1,922.39	758.20
Review photos	0	11	0.22	7.56
Review length	10	1,856	76.53	69.95
Review readability	6.3	17	11.17	5.69
Variable	Min	Max	Frequency	Percent
Review device	0	1	57,022 ^a	42.5% ^b

262 *Note. Observations = 134,106; ^a = The number of mobile-generated reviews (coded as 1); ^b*
263 *= The percentage of mobile-generated reviews.*

264 Table 2 provides the results of the Tobit regression analysis. No multicollinearity
265 issue was found in the regression model, as indicated in the column of the variance inflation
266 factor (VIF): All the variables' VIF was lower than 10. The first independent variable, review
267 positivity measured by rating, was negatively significant ($\beta = -0.8454, p < 0.0001$), indicating
268 that 4-star (moderately positive) reviews are perceived as more helpful than 5-star (extremely
269 positive) ones. Also, the second independent variable (i.e., review positivity measured by text
270 sentiment) was negatively significant ($\beta = -0.7017, p < 0.0001$). As for control variables,
271 reviewer expertise ($\beta = 0.0006, p < 0.0001$), review length ($\beta = 0.0053, p < 0.0001$), review
272 readability ($\beta = 0.0230, p < 0.0001$), and review photos ($\beta = 0.0287, p < 0.05$) were positively
273 significant regarding review helpfulness. However, reviewer experience ($\beta = -0.0011, p <$
274 0.0001) and review age ($\beta = -0.0008, p < 0.0001$) were negatively significant. Lastly, review
275 device ($\beta = 0.0015, p = 0.0274$) were not significant. These variables explained about 19% of
276 the variance of review helpfulness (pseudo- $R^2 = 0.1889$). The regression results on the log-
277 transformed data set showed the consistent findings, indicating the findings were robust.

278 Table 2. Tobit regression analysis

Variables	Review Helpfulness	
	Coefficient	VIF
Constant	-5.7560*** (0.2419)	-
Review positivity 1 (rating)	-0.8454*** (0.0453)	1.0480
Review positivity 2 (text sentiment)	-0.7017*** (0.0245)	1.0001
Reviewer experience	-0.0011*** (0.0001)	4.6434
Reviewer expertise	0.0006*** (0.0000)	4.6165
Review age	-0.0008*** (0.0000)	1.1445
Review length	0.0053*** (0.0003)	1.0910
Review readability	0.0230*** (0.0038)	1.0472
Review device	0.0015 (0.0044)	1.1279
Review photos	0.0287** (0.0110)	1.1221
Restaurant fixed effect	Yes	Yes
Time fixed effect	Yes	Yes
Pseudo-R ²	0.1889	

279 *Note: The values in parentheses indicate standard error; * $p < 0.1$, ** $p < 0.05$, *** $p <$*
280 *0.001.*

281 4.5. Discussion

282 Through online secondary data modeling, Study 1 examined the impact of review
283 positivity on its helpfulness, indicating customers' different perception of online reviews by
284 their positivity. Our findings are aligned with previous studies: the online reviews of positive
285 rating (i.e., 5-star and 4-star) are differently perceived depending on whether the rating is
286 extremely or moderately high (Lee & Koo, 2012; Maslowska et al., 2017; Pentina et al., 2018).
287 In addition, our findings indicate, like previous studies, that customers tend to be skeptical
288 about too positive evaluations when reading the reviews of ORCs (Mudambi & Schuff, 2010;

289 Racherla & Friske, 2012). According to our findings, the attribution theory might be more
290 useful than the regulatory focus theory when explaining customers' perceptions of positive
291 online reviews communicated through ORCs. In the context of ORCs, the helpfulness of a
292 positive review is determined by the extent to which the review is objective enough to attribute
293 its positive evaluation to a product's performance (Laczniak et al., 2001; Sen & Lerman, 2007).
294 Considering that customers use ORCs to assess various aspects of a product based on previous
295 customers' honest feedback (Filieri et al., 2020), a moderately positive review can be more
296 helpful for the assessment than an extremely positive one because the former is seen as more
297 objective and accurate (Lu et al., 2021).

298 Study 1 confirmed the necessary condition to test the different effects of testimonial
299 reviews on customers' decision-making by their positivity. However, Study 1 did not target
300 testimonial reviews and consider customers' responses to a reviewed business (e.g., attitude
301 toward or intention to visit a restaurant). Thus, the findings were not sufficient to answer the
302 research question: How positive reviews a hospitality business needs to display on their
303 websites as testimonials. In Study 2, we addressed these limitations by comparing the effects
304 of extremely positive testimonial reviews on customers' attitude and visit intention with those
305 of moderately positive ones with an experimental design.

306 **5. Study 2**

307 Based on the finding of Study 1 (i.e., extremely and moderately positive reviews are
308 differently perceived by customers), we tested whether and how extremely and moderately
309 positive testimonial reviews affect customers' decision-making in a different manner in Study
310 2. With an experimental design, we examined the effect of positivity of testimonial reviews
311 on customers' attitude toward and intention to visit a restaurant. In the controlled setting
312 where subjects were manipulated into deciding whether to visit a restaurant or not based on
313 its testimonial reviews during a local search, we compared extremely and moderately positive

314 testimonial reviews in terms of their effects on customers' attitude and visit intention to
315 provide an answer to our research question.

316 *5.1. Procedure and Data Collection*

317 A total of 300 participants were recruited from Amazon Mechanical Turk (MTurk) in
318 exchange for a small amount of monetary compensation from November 30 to December 5,
319 2021. The participants were asked to imagine they were doing a local search for a restaurant
320 and seeing the search results (i.e., a list of nearby restaurants). To avoid spillovers resulting
321 from cuisine preferences, a specific cuisine was determined, namely, Italian. They were asked
322 to find the most preferred one based on the information available in the search results, such as
323 each restaurant's average rating (ranged from 4.4 to 4.7 out of 5.0), number of online reviews
324 (ranged from 72 to 923), distance from the current location (ranged from 120-meter to 250-
325 meter), price range (either \$\$ or \$\$\$) and so on (Figure 2). Then, they were asked to check
326 the restaurant's website to further evaluate it. After checking the website, they were asked to
327 take a survey based on their search experience. The participants were asked to use a mobile
328 device for the survey to make it closer to a real local search situation.

329 The participants were randomly assigned to see three 5-star (extremely positive
330 condition) or 4-star (moderately positive condition) testimonial reviews when checking the
331 website. A review's positivity was manipulated through not only its rating but also its text:
332 While only customers' praises (i.e., delicious food, kind staff, and affordable price) were
333 mentioned in 5-star reviews, one inconvenience (i.e., long waiting during a peak time: "place
334 was a bit crowded," "be prepared to line up during busier times") was also included in 4-star
335 ones. As for this manipulation, the participants who considered waiting time as the most
336 important decision criterion could sensitively react to the moderately positive testimonial
337 reviews. To avoid such effects, we asked the participants what the most important decision

338 criterion for their choice of restaurant was and removed the responses of 24 participants who
 339 selected “waiting time.”

340 Other than those 24 responses, 34 participants’ responses were excluded because they
 341 failed to respond correctly to two validity check questions. The validity check questions were
 342 used to confirm whether participants check the rating and read the text of testimonial reviews
 343 (i.e., “What was the rating of review testimonial?”; “What attributes of the restaurant were
 344 not explained in review testimonial?”). Furthermore, we checked how long participants spent
 345 looking at the local search result and restaurant webpage. Given the amount of information
 346 on both pages and page loading time, we reasoned that the participants who spent less than 30
 347 seconds had not been paying sufficient attention, so we removed 44 participants’ responses.
 348 In total, 198 participants’ responses were used for further analysis (109 in the extremely and
 349 89 in the moderately positive condition).

350 Welch’s t-test was conducted to check whether the two groups were similar in terms
 351 of demographics (Table 1), and the results showed that two groups were comparable in terms
 352 of sex ($t = 0.044$, $p = 0.835$), age ($t = 0.419$, $p = 0.518$), employment ($t = 0.154$, $p = 0.695$),
 353 and education ($t = 0.002$, $p = 0.968$). Additionally, both groups were compared in terms of
 354 their preference for Italian food (i.e., “how much do you like Italian food?”; 1 = “dislike a
 355 great deal” and 5 = “like a great deal”) and the frequency of conducting a local search (i.e.,
 356 “how frequently do you conduct a local search?”; 1 = “never” and 5 = “once or twice a day”).
 357 The results indicated that both groups had similar degrees of preference ($M_{\text{extreme}} = 4.61$,
 358 $M_{\text{moderate}} = 4.53$, $t = 1.029$, $p = 0.305$) and frequency ($M_{\text{extreme}} = 3.12$, $M_{\text{moderate}} = 3.29$, $t = -$
 359 1.384 , $p = 0.168$).

360 Table 1. Participants’ demographics

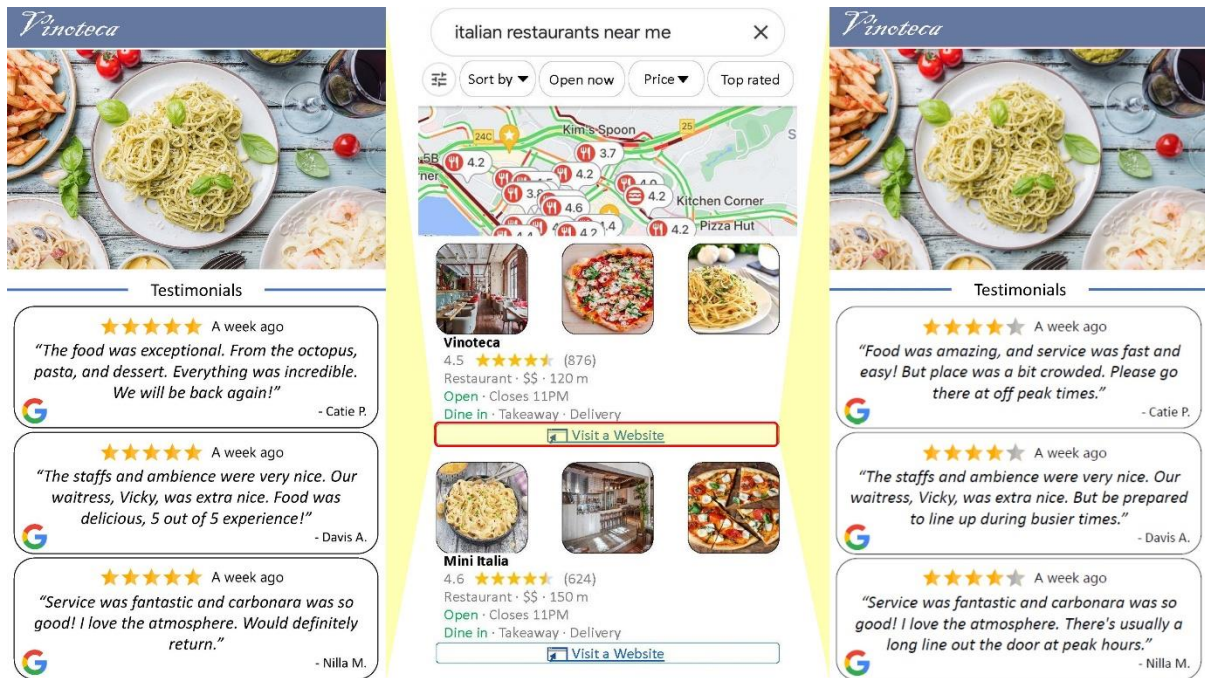
Demographic variables		Extremely		Moderately		t
		Freq.	%	Freq.	%	
Sex	Male	67	61.5	56	62.9	0.044 ($p=0.835$)
	Female	42	38.5	33	37.1	

Age	18–24	13	11.9	9	10.1	0.419 ($p=0.519$)
	25–34	49	45.0	47	52.8	
	35–44	31	28.4	26	29.2	
	45–54	14	12.8	3	3.4	
	55 and above	2	1.8	4	4.5	
Employment	Employed full-time	77	70.6	60	67.4	0.154 ($p=0.695$)
	Employed part-time	3	2.8	9	10.1	
	Unemployed, looking for work	1	0.9	3	3.4	
	Unemployed, not looking for work	3	2.8	1	1.1	
	Self-employed	14	12.8	6	6.7	
	Retired	1	0.9	3	3.4	
	Students	10	9.2	6	6.7	
	Others	0	0.0	1	1.1	
Education	High school graduate	5	4.6	9	10.1	0.002 ($p=0.968$)
	Some college	16	14.7	8	9.0	
	2-year degree	8	7.3	1	1.1	
	4-year degree	60	55.0	55	61.8	
	Postgraduate	20	18.3	16	18.0	
Total		109	100	89	100	

361

362 5.2. Stimuli

363 We created a hypothetical local search result page. Participants could navigate and
364 click on each item, a restaurant in this case. For each restaurant, we created a hypothetical
365 main page of its website. A restaurant logo, three testimonial reviews, three photos of the
366 restaurant’s signature menu, and general information (i.e., opening hours, contact, address,
367 and social media channels) were included on the main page. Three testimonial reviews were
368 located on the top portion of the main page to enable the participants to check them easily. To
369 avoid spillovers resulting from website design, all the elements other than the name, rating,
370 and text of testimonial reviews were consistent (Figure 2).



371

372 Figure 2. Hypothetical page of local search results (middle) and the restaurant website (left:
 373 extremely positive condition; right: moderately positive condition)

374 *5.3. Measures*

375 The effects of testimonial reviews on customers' decision-making were measured by
 376 a list of measurements. On the one hand, we measured participants' attitude toward a
 377 restaurant with five 5-point semantic differential scales (i.e., "what do you think about the
 378 restaurant?"; "bad/good," "negative/positive," "dislikeable/likable," "unfavorable/favorable,"
 379 and "unpleasant/pleasant"). The mean scores of these scales were used for further analysis
 380 (Bennett and Rundle-Thiele, 2002). On the other hand, we measured participants' intention to
 381 visit a restaurant with three 5-point semantic differential scales (i.e., "would you like to visit
 382 the restaurant?"; "unlikely/likely," "improbably/probably," and "impossibly/possibly") (Shen
 383 and Chen, 2007). Again, the mean scores were used for further analysis.

384 To confirm the validity of the measurements, we checked the convergent and
 385 discriminant validity. Table 2 shows the results of validity tests. As for the convergent
 386 validity, all three criteria were met: (1) standardized loading (Loading) of a measurement
 387 should exceed 0.5; (2) composite reliability (CR) of a measurement should exceed 0.7; (3)

388 Cronbach's α of a measurement should exceed 0.7; (4) average variance extracted (AVE) of a
 389 measurement should exceed 0.5. Also, the criterion for the discriminant validity was met: the
 390 square root of AVE of a measurement should be larger than the correlations between the
 391 focal measurement and other measurements (Correlation).

392 Table 2. Convergent and discriminant validity test for Study 1

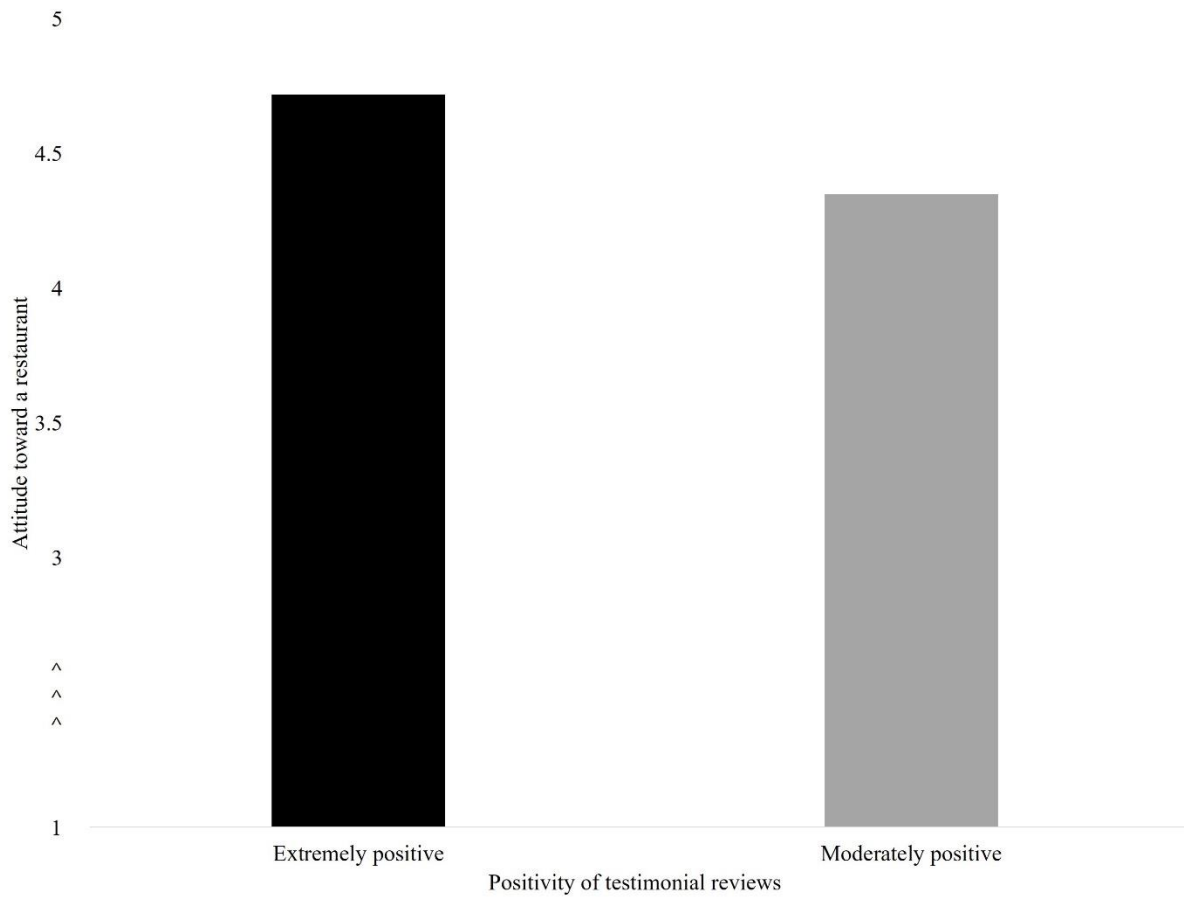
Measurement	Item	Loading	CR	Cronbach's α	AVE (Square root)	Correlation
Attitude	Bad/Good	0.776	0.719	0.888	0.891 (0.944)	0.792
	Negative/Positive	0.767				
	Dislikeable/Likable	0.799				
	Unfavorable/Favorable	0.809				
	Unpleasant/Pleasant	0.785				
Visit intention	Unlikely/Likely	0.626	0.746	0.808	0.707 (0.841)	
	Improbably/Probably	0.697				
	Impossible/Possible	0.679				

393

394 5.4. Results

395 To confirm whether review positivity was successfully manipulated as intended, we
 396 checked whether the participants in the extremely positive condition perceived the
 397 testimonial reviews as more positive than those in the moderately positive condition (i.e.,
 398 "how positive were the testimonial reviews?"; 1 = "extremely negative" and 5 = "extremely
 399 positive"). The participants in the former condition perceived testimonial reviews as more
 400 positive than those in the latter ($M_{\text{extreme}} = 4.94$, $M_{\text{moderate}} = 4.52$, $t = 7.206$, $p < 0.001$).

401 We compared the effects of extremely positive testimonial reviews on customers'
 402 attitudes and visit intention through an independent t-test. As for customers' attitudes, we
 403 found that extremely positive testimonial reviews led the participants to have a more positive
 404 attitude toward the restaurants than moderately positive ones ($M_{\text{extreme}} = 4.72$, $M_{\text{moderate}} =$
 405 4.35 , $t = 3.733$, $p < 0.001$) (Figure 3).



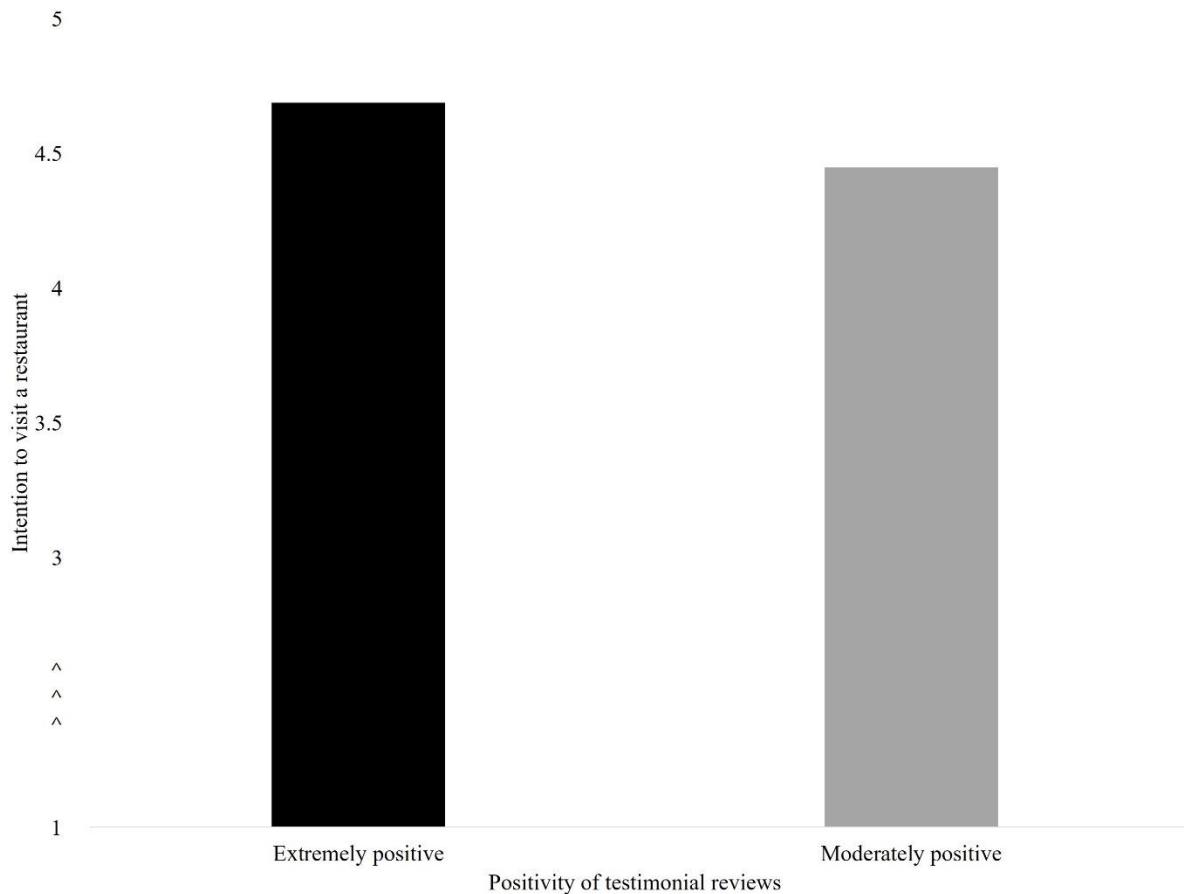
406

407 Figure 3. More positive attitude of the participants in the extremely positive condition

408 Similarly, the participants who saw extremely positive testimonial reviews showed

409 higher visit intention than those who saw moderately positive ones ($M_{\text{extreme}} = 4.69$, M_{moderate}

410 $= 4.45$, $t = 2.496$, $p < 0.05$) (Figure 4).



411

412 Figure 4. Higher visit intention of the participants in the extremely positive condition

413 *5.5. Discussion*

414 By supplementing the limitation of Study 1, Study 2 investigated the review positivity
 415 with testimonial reviews and examined its impact on customers’ perceptions of a reviewed
 416 business in the local search context. In particular, the stronger effects of extremely positive
 417 testimonial reviews on customers’ attitudes and visit intention were examined through an
 418 experimental design. On the one hand, our findings indicate that it is strategic for hospitality
 419 businesses to display extremely positive reviews on their websites as testimonials. This is
 420 aligned with the arguments of Bassig (2020) and Calkins (2019): a hospitality business
 421 should make potential customers who visit its website feel confident about their pre-decision
 422 by displaying glowing testimonial reviews on the website. On the other hand, different from
 423 Study 1, Study 2 indicates that the regulatory focus theory might be more useful than the

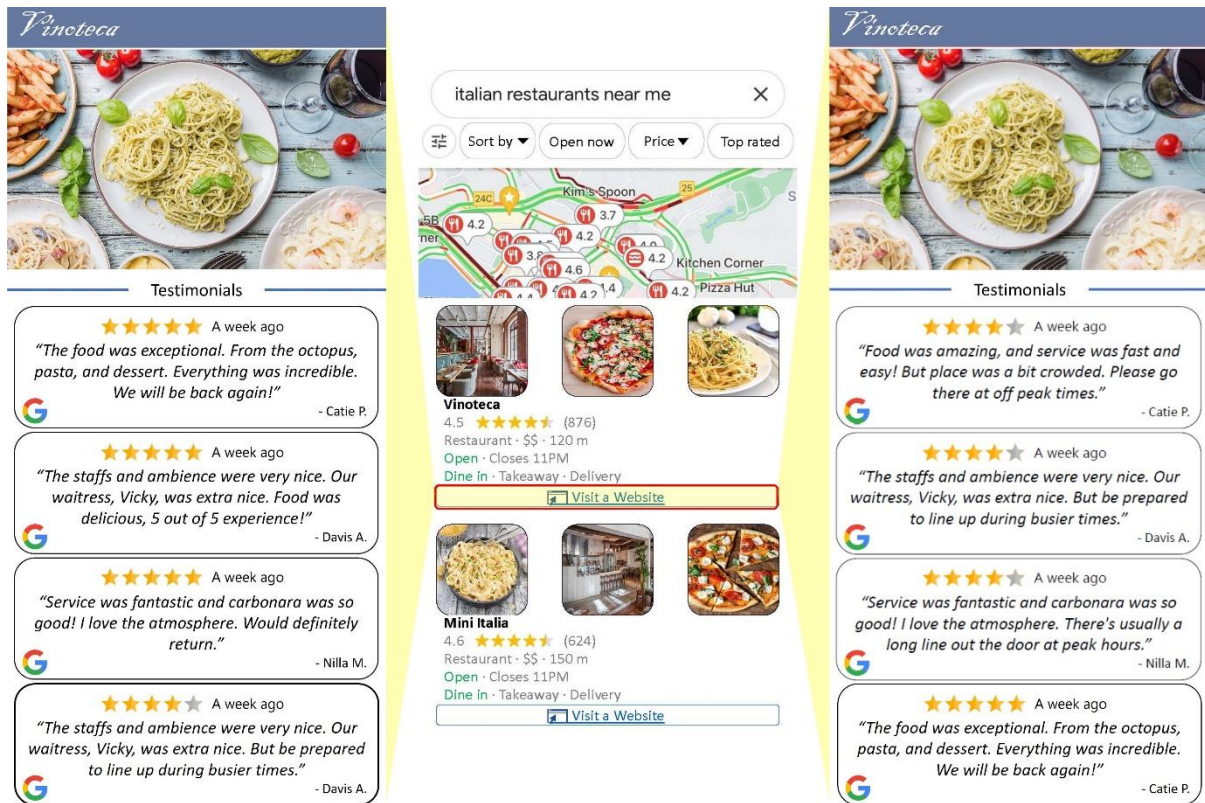
424 attribution theory when explaining customers' perceptions of positive online reviews
425 communicated through a business website.

426 **6. Study 3**

427 In Study 3, we aimed to confirm the findings of Study 2 in the situation in which 5-
428 star and 4-star reviews are displayed together on a hospitality business website. While Study
429 2 assumed all testimonial reviews are either 5-star or 4-star reviews, a mix of them can be
430 displayed in the real situation (e.g., out of five testimonial reviews, four of them are 5-star
431 reviews with one 4-star review or vice versa). Study 3 replicated Study 2 in such a more
432 realistic situation by mixing 4-star and 5-star reviews to further explain the effects of the
433 positivity of testimonial reviews.

434 *6.1. Procedure, Data Collection, Stimuli, and Measures*

435 The design of experiment was consistent with that of Study 2, except that four
436 testimonial reviews were displayed on the website of a restaurant. A review's positivity was
437 manipulated by the ratio of 5-star reviews to 4-star ones. Out of four testimonial reviews,
438 three were 5-star reviews in the extremely positive condition with one 4-star review and vice
439 versa in the moderately positive condition (Figure 5).



440

441 Figure 5. Stimuli of study 3's experiment (left: extremely positive condition; right:

442 moderately positive condition)

443 A total of 200 participants were recruited from Amazon MTurk from August 10 to 13,
 444 2022. Through the validity check process used in Study 1, 47 participants' responses were
 445 removed and, thus, 153 ones were used for further analysis (85 in the extremely and 68 in the
 446 moderately positive condition). According to the results of Welch's t-test, two groups
 447 appeared as comparable in terms of sex ($t = 0.033$ $p = 0.626$), age ($t = 0.051$ $p = 0.884$),
 448 employment ($t = 0.042$ $p = 0.801$), education ($t = 0.048$ $p = 0.799$), preference for Italian food
 449 ($M_{\text{extreme}} = 4.54$, $M_{\text{moderate}} = 4.58$, $t = -1.031$, $p = 0.307$), and frequency of conducting a local
 450 search ($M_{\text{extreme}} = 4.11$, $M_{\text{moderate}} = 4.08$, $t = 1.801$, $p = 0.341$).

451 The stimuli and measures adopted in Study 2 were used in Study 3. The convergent
 452 and discriminant validity of the measurements were all satisfied.

453 *6.2. Results*

454 The review positivity appeared as well manipulated as intended ($M_{\text{extreme}} = 4.82$,
455 $M_{\text{moderate}} = 4.11$, $t = 8.611$, $p < 0.001$). Similar to Study 1, an independent t-test was
456 conducted. As examined in Study 1, the participants in the extremely positive condition
457 showed more positive attitude toward the restaurants ($M_{\text{extreme}} = 4.87$, $M_{\text{moderate}} = 4.04$, $t =$
458 4.127 , $p < 0.001$) and higher visit intention than those in the moderately positive condition
459 ($M_{\text{extreme}} = 4.91$, $M_{\text{moderate}} = 4.07$, $t = 4.241$, $p < 0.001$).

460 *6.3. Discussion*

461 Study 3 replicated Study 2 in the situation in which extremely and moderately
462 positive testimonial reviews are displayed together on a hospitality business website to
463 further investigate the effects of the positivity of testimonial reviews on customers' decision-
464 making. The results of Study 3 were consistent with the findings of Study 2 in that it is more
465 strategic for a hospitality business to display extremely positive reviews on their websites as
466 testimonials. Specifically, when displaying extremely and moderately positive reviews
467 together, the proportion of extremely positive reviews should be greater than moderately
468 positive reviews to generate customers' positive attitudes and visiting intentions.
469 Accordingly, the findings of Study 2 and Study 3 further supported the regulatory focus
470 theory (Bassig, 2020; Calkins, 2019), emphasizing the importance of extremely positive
471 testimonial reviews.

472 **7. General Discussion**

473 An increasing number of hospitality businesses are displaying positive online reviews
474 as testimonials on their websites to convert website visitors into actual ones. Regarding the
475 testimonial review strategy, there have been two conflicting views: hospitality businesses
476 need to display 1) moderately positive reviews on their websites to decrease customers'
477 skepticism toward the company-controlled sources of eWOM; 2) extremely positive reviews

478 to provide customers with a final push with the customer-generated sources of advertisement.
479 It has been difficult for hospitality businesses to address the dilemma because no empirical
480 evidence has been provided. This research attempted to shed light on the conflict by
481 examining the impact of the positivity of testimonial reviews on customers' decision-making.

482 To achieve the objectives, we conducted three studies by adopting a mixed-method
483 approach in the context of customers' choice of restaurant in Hong Kong. With online
484 secondary data modeling, Study 1 tested a necessary condition for comparing extremely and
485 moderately testimonial reviews, and found that a positive review was differently perceived
486 depending on how extremely positive it was. Building on the findings of Study 1, Study 2
487 compared the effects of extremely positive testimonial reviews on customers' restaurant
488 perception (i.e., attitude and visit intention) with those of moderately positive ones via an
489 experimental design, and found the stronger effects of extremely positive testimonial reviews.
490 Study 3 provided further support Study 2 by examining by replicating the findings of Study 2
491 in the situation in which extremely and moderately positive testimonial reviews are displayed
492 together on a restaurant's website: When 5-star and 4-star reviews are displayed together on a
493 restaurant website, the more number of 5-star reviews are recommended to be displayed as
494 testimonial reviews to improve customers' restaurant attitude and increase their visit
495 intention.

496 The findings indicated that an extremely positive (i.e., 5-star) review could be a
497 strategic choice for the testimonial review strategy for a restaurant in specific and a
498 hospitality business in general. The findings can be explained by the view supported by the
499 regulatory focus theory: when customers are interested in a restaurant and visit its website,
500 they are prone to be affected by positively valenced information (Aaker & Lee, 2001; Idson
501 et al., 2000), and, thus, the restaurant needs to display glowing testimonial reviews on its
502 website to give the final push to the customers (Bassig, 2020; Calkins, 2019). In other words,

503 the higher impact of an extremely positive testimonial review on customers' choice of a
504 restaurant than that of a moderately positive one could be attributed to the expectation that
505 customers have when being interested in a restaurant: customers want to be certain about
506 their pre-choice when following up on the product of interest (Calkins, 2019).

507 Additionally, while not a main focus of this study, the results implied that the impact
508 of review positivity on customers' perceptions might be moderated by an online platform:
509 whether an online review is communicated through OCRs or a business website. According
510 to our results, moderately positive reviews had stronger effects on customers' perceptions
511 than extremely positive ones when the reviews were communicated via OCRs, but vice versa
512 when communicated via a business website. These results proposed the importance of
513 considering a type of online platform where an online review is communicated to better
514 explain the impact of review positivity on customers' perceptions.

515 *7.1. Theoretical Contributions*

516 First, this research contributes to the hospitality literature on online reviews, as
517 existing research has rarely focused on testimonial reviews. Reviews are communicated
518 through various types of online platforms (Kattiyapornpong et al., 2021), and a hospitality
519 business's website is one of them (Chen et al., 2020). Furthermore, testimonial reviews
520 communicated through such a website differ from those on OTAs and OCRs in that the
521 former have characteristics of both eWOM and advertisements (Holden et al., 2021; Lacroix
522 et al., 2018). The previous findings regarding the effects of reviews on customers' decision-
523 making in the context of OTAs or ORCs might not be valid in the context of hospitality
524 business websites. This research confirmed the possibility: while extremely positive reviews
525 were found to have lower effects on customers' decision-making than moderately positive
526 ones (Park & Nicolau, 2015; Pentina et al., 2018; Racherla & Friske, 2012; Roh & Yang,
527 2021), the opposite findings were observed when testimonial reviews were considered in this

528 research. While reviews have been investigated by a number of studies in the hospitality
529 field, this research suggested that reviews can be still a fascinating research topic if their role
530 is considered when they are used as testimonial reviews in a hospitality business's website.

531 Second, this research contributes to the marketing literature on testimonial reviews.
532 Despite the prevalent usage of testimonial reviews across domains, such as clinics (Lacroix et
533 al., 2018), healthcare or beauty products (e.g., drugs, cosmetics) (Hall et al., 2013), education
534 institutes (Phu & Byrne, 2018), and job recruitment (Van Hoye & Lievens, 2007), little has
535 been known about which particular testimonial reviews have significant effects on customers'
536 decision-making. While a few studies examined the effects of specific information
537 components of testimonial reviews on customers' decision-making (e.g., review writers'
538 expertise, format) (Reich & Maglio, 2020; Walker et al., 2011), to our knowledge, their
539 positivity has not been studied in the literature. This research demonstrated the role of the
540 positivity of testimonial reviews in customers' decision-making.

541 Third, this research contributes to online review studies by suggesting a situational
542 factor that could affect the effect of review positivity on customers' information processing
543 (i.e., how customers process an online review to evaluate a reviewed business). While many
544 studies compared the effects of extremely positive reviews with those of moderately positive
545 ones, they reached mixed findings (Purnawirawan et al., 2012; Purnawirawan et al., 2015).
546 Our findings helped to resolve this inconsistency by suggesting a potential reason.
547 Specifically, the findings indicated that the way customers process a positive review for their
548 decision-making was dependent on the type of online platform where the reviews were
549 communicated. Additionally, the findings proposed that the impact of review positivity on
550 customers' information processing should be explained with different theories (i.e., the
551 attribute or regulatory focus theory) depending on the type of online platform. Considering
552 that recent online review studies attempted to explain the role of review positivity in

553 customers' information processing (Lopes et al., 2022; Woolley & Sharif, 2021), this
554 research provided a meaningful implication by calling for a specific situational factor to be
555 considered to further understand the impact of review positivity on the decision-making.

556 Lastly, while many hospitality studies regarding online reviews adopted a single
557 approach (Schuckert et al., 2015), this research utilized a mixed-method approach by
558 conducting both online secondary data modeling and an experimental design. By pointing out
559 the weakness in a single method, the literature argued the importance of utilizing a mixed-
560 method approach for the triangulated understanding of the effects of online reviews on
561 customers' decision-making (Kwok et al., 2017). However, the online review research
562 adopting a mixed-method approach has been still limited in the hospitality context (Baker &
563 Kim, 2019; Li et al., 2020; Xu et al., 2020). This research addressed one of the
564 methodological limitations of the literature.

565 *6.2. Practical Contributions*

566 This research offers an important insight for hospitality businesses seeking to leverage
567 testimonial reviews to increase their conversion rate. This research suggested that hospitality
568 businesses need to display unambiguously positive reviews than ambiguously positive ones
569 on their websites as testimonials (Bassig, 2020). Considering whether hospitality businesses
570 need to display glowing or authentic reviews on their websites has been debated but no
571 evidence has been provided, this practical implication could be considered a benchmark for
572 testimonial review marketing. Additionally, we noted that a website design approach that
573 benefits hospitality businesses should match website visitors' expectations. Our findings
574 revealed that when visiting a website of the business of interest during a local search,
575 customers appreciated the information that makes them feel confident about their pre-choice,
576 such as glowing testimonial reviews (Calkins, 2019; Tsao & Hsieh, 2015). This research
577 suggested that a hospitality business needs to consider such website visitors' expectations

578 when designing its website connected to a local search application (e.g., Google Maps). For
579 example, a hospitality business could make its website connected to a local search application
580 more effective in converting website visitors into actual ones by prioritizing advertising
581 information (e.g., testimonial reviews, recent news articles, Instagram posts) rather than
582 general information (e.g., location, working hours, contact).

583 *6.3. Limitations and Future Research Directions*

584 This study has several limitations that suggest future research opportunities. First, we
585 considered a specific context: customers checking testimonial reviews during local searches
586 for restaurants. Customers use testimonial reviews not only during a local search on a mobile
587 device but also during a pre-trip search on a desktop. Also, testimonial review marketing is
588 prevalently adopted in other business domains, such as attractions or hotels. Given these
589 different possible cases, the findings of the current study have limited generalizability.
590 Furthermore, the results were limited to within a specific cultural setting. Future research can
591 examine the effect of the positivity of testimonial reviews on customers' decision-making
592 under different contexts and cultural settings to make the findings more generalizable.

593 Second, both the online secondary data modeling and the experimental design used in
594 this study were not free from methodological problems. For example, some information
595 components of an online review were not considered in the online secondary data modeling,
596 such as the main topics of review text (Shin & Nicolau, 2022). Also, there might be sampling
597 biases because the reviews were collected only from a single platform (Xiang et al., 2017).
598 As for the experimental design, there could be exogenous factors that were not controlled
599 during the experiments. For example, while Google logos and TripAdvisor awards were
600 included on the hypothetical main page of restaurant's website to make it look like a real
601 website, the popularity of the well-recognized brands could affect participants' review and

602 restaurant perceptions. Future research can provide more robust empirical evidence by
603 addressing these methodological issues.

604 **Declarations of Interest**

605 None

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609 **References**

- 610 Aaker, J. L., & Lee, A. Y. (2001). "I" seek pleasures and "we" avoid pains: The role of self-
611 regulatory goals in information processing and persuasion. *Journal of Consumer*
612 *Research*, 28(1), 33-49.
- 613 Aghakhani, N., Oh, O., Gregg, D. G., & Karimi, J. (2021). Online review consistency
614 matters: An elaboration likelihood model perspective. *Information Systems Frontiers*,
615 23(5), 1287-1301.
- 616 Anscombe, F. J. (1960). Rejection of outliers. *Technometrics*, 2(2), 123-146.
- 617 Baker, M. A., & Kim, K. (2019). Value destruction in exaggerated online reviews: the effects
618 of emotion, language, and trustworthiness. *International Journal of Contemporary*
619 *Hospitality Management*.
- 620 Bassig, M. (2020). How to Showcase Reviews on Your Website and Social Media. Retrieved
621 from <https://www.reviewtrackers.com/blog/marketing-reviews/>
- 622 Bazaarvoice. (2019). Shopper Experience Index. *Bazaarvoice*. Retrieved from
623 [https://www.bazaarvoice.com/wp-content/themes/bazaarvoice/_sei-](https://www.bazaarvoice.com/wp-content/themes/bazaarvoice/_sei-2019/static/downloads/BV19-SEI-Main-NA-Final.pdf)
624 [2019/static/downloads/BV19-SEI-Main-NA-Final.pdf](https://www.bazaarvoice.com/wp-content/themes/bazaarvoice/_sei-2019/static/downloads/BV19-SEI-Main-NA-Final.pdf)
- 625 Bollen, K. A., & Jackman, R. W. (1985). Regression diagnostics: An expository treatment of
626 outliers and influential cases. *Sociological Methods & Research*, 13(4), 510-542.

627 Boyd, R. L., Ashokkumar, A., Seraj, S., & Pennebaker, J. W. (2022). The development and
628 psychometric properties of LIWC-22. *Austin, TX: University of Texas at Austin.*

629 Calkins, P. (2019). How to Add Google Reviews to Your Website (and Why you Need
630 them). *CWS*. Retrieved from [https://blog.cws.net/how-to-add-google-reviews-to-your-](https://blog.cws.net/how-to-add-google-reviews-to-your-website-and-why-you-need-them)
631 [website-and-why-you-need-them](https://blog.cws.net/how-to-add-google-reviews-to-your-website-and-why-you-need-them)

632 Carter, R. (2022). The Ultimate List of Online Review Statistics for 2022. *Findstack*.
633 Retrieved from <https://findstack.com/online-review-statistics/>

634 Chen, F., Liu, S. Q., & Mattila, A. S. (2020). Bragging and humblebragging in online
635 reviews. *Annals of Tourism Research*, 80, 102849.

636 Cheng, Y.-H., & Ho, H.-Y. (2015). Social influence's impact on reader perceptions of online
637 reviews. *Journal of Business Research*, 68(4), 883-887.

638 Cho, H. S., Sosa, M. E., & Hasija, S. (2021). Reading Between the Stars: Understanding the
639 Effects of Online Customer Reviews on Product Demand. *Manufacturing & Service*
640 *Operations Management*.

641 Cook, R. D. (1977). Detection of influential observation in linear regression. *Technometrics*,
642 19(1), 15-18.

643 Crabtree, J. (2021). 50+ Mobile Local Search Statistics You Need to Know (2021).
644 *MomentFeed*. Retrieved from [https://momentfeed.com/blog/50-mobile-local-search-](https://momentfeed.com/blog/50-mobile-local-search-statistics-you-need-to-know-2021/)
645 [statistics-you-need-to-know-2021/](https://momentfeed.com/blog/50-mobile-local-search-statistics-you-need-to-know-2021/)

646 Dale. (2022). An Overview of Hong Kong Restaurant Data in 2021. *Foodie*. Retrieved from
647 [https://www.afoodieworld.com/dale/an-overview-of-hong-kong-restaurant-data-in-](https://www.afoodieworld.com/dale/an-overview-of-hong-kong-restaurant-data-in-2021)
648 [2021](https://www.afoodieworld.com/dale/an-overview-of-hong-kong-restaurant-data-in-2021)

649 DATA.GOV.HK. (2021). Restaurant licences. *Hong Kong Government*. Retrieved from
650 <https://data.gov.hk/en-data/dataset/hk-fehd-fehdlmis-restaurant-licences>

651 Filieri, R., Acikgoz, F., Ndou, V., & Dwivedi, Y. (2020). Is TripAdvisor still relevant? The
652 influence of review credibility, review usefulness, and ease of use on consumers'
653 continuance intention. *International Journal of Contemporary Hospitality*
654 *Management*.

655 Georgiev, D. (2022). Latest Online Reviews Statistics in 2022 – The Impact on Business.
656 *Review42*. Retrieved from <https://review42.com/resources/online-reviews-statistics/>

657 Gunning, R. (1952). *Technique of clear writing*. New York: McGraw-Hill.

658 Hall, M., Gough, B., & Seymour-Smith, S. (2013). Stake management in men's online
659 cosmetics testimonials. *Psychology & Marketing*, 30(3), 227-235.

660 Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & Gremler, D. D. (2004). Electronic word-of-
661 mouth via consumer-opinion platforms: what motivates consumers to articulate
662 themselves on the internet? *Journal of interactive marketing*, 18(1), 38-52.

663 Hernández-Ortega, B. (2020). When the performance comes into play: The influence of
664 positive online consumer reviews on individuals' post-consumption responses.
665 *Journal of Business Research*, 113, 422-435.

666 Higgins, E. T. (1997). Beyond pleasure and pain. *American psychologist*, 52(12), 1280.

667 Holden, A., Nanayakkara, S., Skinner, J., Spallek, H., & Sohn, W. (2021). What do
668 Australian health consumers believe about commercial advertisements and
669 testimonials? a survey on health service advertising. *BMC Public Health*, 21(1), 1-12.

670 Hu, X., & Yang, Y. (2021). What makes online reviews helpful in tourism and hospitality? a
671 bare-bones meta-analysis. *Journal of Hospitality Marketing & Management*, 30(2),
672 139-158.

673 Idson, L. C., Liberman, N., & Higgins, E. T. (2000). Distinguishing gains from nonlosses and
674 losses from nongains: A regulatory focus perspective on hedonic intensity. *Journal of*
675 *experimental social psychology*, 36(3), 252-274.

676 Ismagilova, E., Dwivedi, Y. K., & Slade, E. (2020). Perceived helpfulness of eWOM:
677 Emotions, fairness and rationality. *Journal of Retailing and Consumer Services*, 53,
678 101748.

679 Kalnaovakul, K., & Promsivapallop, P. (2021). Dimensions of Night Market Visit Experience
680 of International Tourists: An Analysis of Google Reviews of Night Markets in
681 Phuket, Thailand. *Asia-Pacific Social Science Review*, 21(3).

682 Kashyap, R., Kesharwani, A., & Ponnamp, A. (2022). Measurement of online review
683 helpfulness: a formative measure development and validation. *Electronic Commerce*
684 *Research*, 1-34.

685 Kattiyapornpong, U., Ditta-Apichai, M., & Chuntamara, C. (2021). Exploring gastronomic
686 tourism experiences through online platforms: Evidence from Thai local communities.
687 *Tourism recreation research*, 1-17.

688 Kavanagh, M. (2019). The Impact of Customer Reviews on Purchase Decisions. Retrieved
689 from [https://www.bizrateinsights.com/resources/shopper-survey-report-the-impact-](https://www.bizrateinsights.com/resources/shopper-survey-report-the-impact-reviews-have-on-consumers-purchase-decisions/)
690 [reviews-have-on-consumers-purchase-decisions/](https://www.bizrateinsights.com/resources/shopper-survey-report-the-impact-reviews-have-on-consumers-purchase-decisions/)

691 Kelley, H. H. (1973). The processes of causal attribution. *American psychologist*, 28(2), 107.

692 Kelso, A. (2019). 77% of diners check restaurant websites before visiting, survey finds.
693 *Restaurant Dive*. Retrieved from [https://www.restaurantdive.com/news/77-of-diners-](https://www.restaurantdive.com/news/77-of-diners-visit-restaurant-websites-before-going-survey-finds/562008/)
694 [visit-restaurant-websites-before-going-survey-finds/562008/](https://www.restaurantdive.com/news/77-of-diners-visit-restaurant-websites-before-going-survey-finds/562008/)

695 Kim, M., Kim, E. J., & Busser, J. A. (2022). Food delivery now or later: The match-up effect
696 of purchase timeframe and review recency. *International Journal of Hospitality*
697 *Management*, 102, 103143.

698 Kwok, L., Xie, K. L., & Richards, T. (2017). Thematic framework of online review research:
699 A systematic analysis of contemporary literature on seven major hospitality and
700 tourism journals. *International Journal of Contemporary Hospitality Management*.

701 Lacroix, E., Dobson, K. S., & von Ranson, K. M. (2018). Scope and ethics of psychologists'
702 use of client testimonials on professional websites. *Canadian Psychology/psychologie*
703 *canadienne*, 59(3), 232.

704 Laczniak, R. N., DeCarlo, T. E., & Ramaswami, S. N. (2001). Consumers' responses to
705 negative word-of-mouth communication: An attribution theory perspective. *Journal*
706 *of consumer psychology*, 11(1), 57-73.

707 Lee, H.-J., & Ko, J.-Y. (2022). Culinary capital of Michelin restaurants consumers: A
708 netnographic analysis. *Journal of Hospitality and Tourism Management*, 51, 415-423.

709 Lee, K.-T., & Koo, D.-M. (2012). Effects of attribute and valence of e-WOM on message
710 adoption: Moderating roles of subjective knowledge and regulatory focus. *Computers*
711 *in Human behavior*, 28(5), 1974-1984.

712 Lee, M., Jeong, M., & Lee, J. (2017). Roles of negative emotions in customers' perceived
713 helpfulness of hotel reviews on a user-generated review website: A text mining
714 approach. *International Journal of Contemporary Hospitality Management*.

715 Leung, D. (2021). Unraveling the interplay of review depth, review breadth, and review
716 language style on review usefulness and review adoption. *International Journal of*
717 *Hospitality Management*, 97, 102989.

718 Li, H., Ji, H., Liu, H., Cai, D., & Gao, H. (2022). Is a picture worth a thousand words?
719 Understanding the role of review photo sentiment and text-photo sentiment disparity
720 using deep learning algorithms. *Tourism management*, 92, 104559.

721 Li, H., Meng, F., & Pan, B. (2020). How does review disconfirmation influence customer
722 online review behavior? A mixed-method investigation. *International Journal of*
723 *Contemporary Hospitality Management*.

- 724 Li, Z., Lam, T., DeWolf, C., & Lau, V. (2017). 40 reasons Hong Kong is the world's greatest
725 city. *CNN Travel*. Retrieved from [https://edition.cnn.com/travel/article/hong-kong-
727 worlds-greatest-city/index.html](https://edition.cnn.com/travel/article/hong-kong-
726 worlds-greatest-city/index.html)
- 727 Litvin, S. W., Goldsmith, R. E., & Pan, B. (2008). Electronic word-of-mouth in hospitality
728 and tourism management. *Tourism management*, 29(3), 458-468.
- 729 Liu, Z., & Park, S. (2015). What makes a useful online review? Implication for travel product
730 websites. *Tourism management*, 47, 140-151.
- 731 Long, J. S. (1997). *Regression models for categorical and limited dependent variables* (Vol.
732 7): Sage.
- 733 Lopes, A. I., Dens, N., & De Pelsmacker, P. (2022). Valence and attribute repetition in
734 negative sets of online reviews:(when) can positive reviews overcome negative ones?
735 *Journal of Electronic Commerce Research*, 23(1), 1-12.
- 736 Lu, S., Qiu, L., & Wang, K. (2021). The effects of the format of two-sided online reviews: A
737 linguistic perspective. *Information & management*, 58(8), 103554.
- 738 Mariani, M. M., Borghi, M., & Gretzel, U. (2019). Online reviews: differences by submission
739 device. *Tourism management*, 70, 295-298.
- 740 Maslowska, E., Malthouse, E. C., & Bernritter, S. F. (2017). Too good to be true: the role of
741 online reviews' features in probability to buy. *International Journal of Advertising*,
742 36(1), 142-163.
- 743 Meijer, P. C., Verloop, N., & Beijgaard, D. (2002). Multi-method triangulation in a qualitative
744 study on teachers' practical knowledge: An attempt to increase internal validity.
745 *Quality and quantity*, 36(2), 145-167.
- 746 Meuter, M. L., McCabe, D. B., & Curran, J. M. (2013). Electronic word-of-mouth versus
747 interpersonal word-of-mouth: are all forms of word-of-mouth equally influential?
748 *Services Marketing Quarterly*, 34(3), 240-256.

749 Mudambi, S. M., & Schuff, D. (2010). Research note: What makes a helpful online review?
750 A study of customer reviews on Amazon. com. *MIS quarterly*, 185-200.

751 Murphy, R. (2020). Local Consumer Review Survey 2020. *BrightLocal*. Retrieved from
752 <https://www.brightlocal.com/research/local-consumer-review-survey/>

753 Nasiruddin, K., Hashim, H., & Yusof, R. (2016). Electronic Word of Mouth: Exploring the
754 Consumer Perspective. *International Journal of Accounting and Business*
755 *Management*, 4.

756 Park, S., & Nicolau, J. L. (2015). Asymmetric effects of online consumer reviews. *Annals of*
757 *Tourism Research*, 50, 67-83.

758 Pentina, I., Bailey, A. A., & Zhang, L. (2018). Exploring effects of source similarity, message
759 valence, and receiver regulatory focus on yelp review persuasiveness and purchase
760 intentions. *Journal of Marketing Communications*, 24(2), 125-145.

761 Phu, W., & Byrne, T. (2018). Testimonials on the web: Evidence for violations of the
762 professional and ethical compliance code for behavior analysts. *Behavior Analysis:*
763 *Research and Practice*, 18(4), 419.

764 Purnawirawan, N., De Pelsmacker, P., & Dens, N. (2012). Balance and sequence in online
765 reviews: How perceived usefulness affects attitudes and intentions. *Journal of*
766 *interactive marketing*, 26(4), 244-255.

767 Purnawirawan, N., Eisend, M., De Pelsmacker, P., & Dens, N. (2015). A meta-analytic
768 investigation of the role of valence in online reviews. *Journal of interactive*
769 *marketing*, 31, 17-27.

770 Qiu, L., Pang, J., & Lim, K. H. (2012). Effects of conflicting aggregated rating on eWOM
771 review credibility and diagnosticity: The moderating role of review valence. *Decision*
772 *Support Systems*, 54(1), 631-643.

773 Racherla, P., & Friske, W. (2012). Perceived 'usefulness' of online consumer reviews: An
774 exploratory investigation across three services categories. *Electronic Commerce*
775 *Research and Applications*, 11(6), 548-559.

776 Reich, T., & Maglio, S. J. (2020). Featuring mistakes: The persuasive impact of purchase
777 mistakes in online reviews. *Journal of marketing*, 84(1), 52-65.

778 Roh, M., & Yang, S.-B. (2021). Exploring extremity and negativity biases in online reviews:
779 Evidence from Yelp. com. *Social behavior and personality: an international journal*.

780 Schuckert, M., Liu, X., & Law, R. (2015). Hospitality and tourism online reviews: Recent
781 trends and future directions. *Journal of Travel & Tourism Marketing*, 32(5), 608-621.

782 Sen, S., & Lerman, D. (2007). Why are you telling me this? An examination into negative
783 consumer reviews on the web. *Journal of interactive marketing*, 21(4), 76-94.

784 Shin, S., & Nicolau, J. L. (2022). Identifying attributes of wineries that increase visitor
785 satisfaction and dissatisfaction: Applying an aspect extraction approach to online
786 reviews. *Tourism management*, 91, 104528.

787 Sullivan, H. W., O'Donoghue, A. C., Read, J. G., Amoozegar, J. B., Aikin, K. J., & Rupert,
788 D. J. (2018). Testimonials and informational videos on branded prescription drug
789 websites: experimental study to assess influence on consumer knowledge and
790 perceptions. *Journal of medical Internet research*, 20(1), e13.

791 Tsao, W.-C., & Hsieh, M.-T. (2015). eWOM persuasiveness: do eWOM platforms and
792 product type matter? *Electronic Commerce Research*, 15(4), 509-541.

793 Van Hove, G., & Lievens, F. (2007). Investigating web-based recruitment sources: Employee
794 testimonials vs word-of-mouth. *International Journal of Selection and Assessment*,
795 15(4), 372-382.

796 Walker, H. J., Feild, H. S., Giles, W. F., Bernerth, J. B., & Short, J. C. (2011). So what do
797 you think of the organization? A contextual priming explanation for recruitment web
798 site characteristics as antecedents of job seekers' organizational image perceptions.
799 *Organizational Behavior and Human Decision Processes*, 114(2), 165-178.

800 Woolley, K., & Sharif, M. A. (2021). Incentives increase relative positivity of review content
801 and enjoyment of review writing. *Journal of Marketing research*, 58(3), 539-558.

802 Xiang, Z., Du, Q., Ma, Y., & Fan, W. (2017). A comparative analysis of major online review
803 platforms: Implications for social media analytics in hospitality and tourism. *Tourism*
804 *management*, 58, 51-65.

805 Xu, Y., Li, H., Law, R., & Zhang, Z. (2020). Can receiving managerial responses induce
806 more user reviewing effort? A mixed method investigation in hotel industry. *Tourism*
807 *management*, 77, 103982.

808 Yeo, R. (2021). Hong Kong restaurant receipts up whopping 44 per cent year on year in third
809 quarter. *South China Morning Post*. Retrieved from
810 [https://www.scmp.com/comment/opinion/article/3157419/no-need-be-selfish-choice-](https://www.scmp.com/comment/opinion/article/3157419/no-need-be-selfish-choice-coronavirus-masks?module=perpetual_scroll&pgtype=article&campaign=3157419)
811 [coronavirus-masks?module=perpetual_scroll&pgtype=article&campaign=3157419](https://www.scmp.com/comment/opinion/article/3157419/no-need-be-selfish-choice-coronavirus-masks?module=perpetual_scroll&pgtype=article&campaign=3157419)

812 Yost, E., Zhang, T., & Qi, R. (2021). The power of engagement: Understanding active social
813 media engagement and the impact on sales in the hospitality industry. *Journal of*
814 *Hospitality and Tourism Management*, 46, 83-95.

815 Yu, C.-E. (2020). Humanlike robots as employees in the hotel industry: Thematic content
816 analysis of online reviews. *Journal of Hospitality Marketing & Management*, 29(1),
817 22-38.

818