Monitoring hotel response management: A multidimensional approach

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A B S T R A C T

How companies respond to their customers' reviews is a key issue. These responses can affect the perceptions that current and potential customers have about a company. This is particularly true for tourism services. This paper proposes a model to monitor hotels' response strategy to online reviews and to evaluate the effectiveness of their communication through its impact on customer satisfaction and promotional behaviour, specifically in terms of customers' revisiting and recommendation intentions. The proposed model evaluates customers' perceptions about the response they receive by splitting hotels' response management (HRM) into two dimensions (communication quality and response policy) to evaluate the response strategy more precisely. Moreover, the effectiveness of HRM is moderated by a set of variables that can provide relevant additional information to managers. Results confirm a positive influence of two dimensions of HRM on satisfaction and promotional behaviour and the moderating effect of comment relevance, rating, polarity and reviewer's experience.

1. Introduction

As electronic word of mouth (eWOM) has become more pervasive, hotel managers have progressively developed a more active role in on-line communication by managing responses to customers' reviews (Levy et al., 2013; Gu and Ye, 2014; Xie et al., 2014, 2017a, 2017b; Liu et al., 2021). This two-way communication through social media can influence customers' attitudes and even hotel performance (Sparks et al., 2016; Proserpio and Zervas, 2017; Li et al., 2018; Xu et al., 2020; Chen et al., 2019; Zhang et al., 2019).

Versatility, transparency and high connectivity offered by platforms such as TripAdvisor allow managers to individually respond to comments, and for consumers to see reviews from their peers as well as managers' responses to them (Kwok et al., 2017). This new dynamic among consumers provides new information for managers to further engage and interact with their customers (King et al., 2014; Liu et al., 2021).

Hotels' response management to their customers' online reviews, i. e., HRM has key practical implications in product development, customer relations, corporate reputation and economic performance (Kwok et al., 2017; Xie et al., 2017a, 2017b; Vignal Lambret and Barki, 2018). Therefore, it is strategically important for hotel managers to understand how HRM can moderate the influence of consumers' opinions on hotel performance (Xie et al., 2014; Alrawadieh and Dincer,

2019), and how HRM can affect customers' future commitment to a hotel (King et al., 2014). However, there is still insufficient research on how to respond effectively to online reviews, and this issue continues to baffle most hotel managers (Li et al., 2017; Zhang et al., 2020; Liu et al., 2021). Moreover, there is scant literature on hotel responses to online reviews that has examined the effectiveness of different response types (Sparks et al., 2016; Zhang et al., 2020). Therefore, it is necessary to empirically examine the effect of different online response strategies to offer management appropriate lines of action in their online communication that could increase the effectiveness of management responses (Sparks et al., 2016; Xie et al., 2017b).

Drawing upon social exchange theory (SET), this paper contributes to a better understanding of the effectiveness of organisational responses to online reviews of hotels and answers recent calls in the literature for more research in this field. The paper proposes a model that allows the operationalization and monitoring of hotels' response strategy to customers' online reviews. This model provides managers with ways to evaluate the effectiveness of their communication in terms of its impact on customer satisfaction and promotional behaviour (revisiting and recommendation intention). To do this, a moderating effects analysis is conducted to evaluate the influence on HRM effectiveness of hotel-related elements (e.g., position of the respondent or hotel rating scores) as well as customer profiles as reviewers on online platforms (e. g., demographic profile or the reviewer's experience), including some

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variables not previously tested.

Moreover, this paper makes a relevant theoretical contribution by conceptualising HRM from a multi-dimensional perspective, unlike previous literature approaches. This structure makes it possible to evaluate not only the response policy itself, widely referenced in the literature, but also the accuracy or quality of the HRM perceived by customers.

This proposal facilitates the operationalisation of the strategic management based on customers' perceptions, providing a significant advance in the protocolization of the design and monitoring of an effective HRM. According to SET, this would improve bidirectional communication between reviewing customers and responding managers to achieve an effective social exchange with mutual understanding (Lee et al., 2017).

Finally, another significant contribution is that the customers themselves express their perceptions of the management response. In this way, the actual situation of online communication between customers and hotels is directly studied. Whereas most previous studies use quantitative data extracted from the databases of third-party sites (e.g., delay and response rate) or information obtained from semantic analysis of the textual content of online communication recorded on these platforms. In some cases, questionnaires are used, but they are usually applied in an experimental context designed in research and applied to simulated samples (Zhang et al., 2019).

2. Literature review

2.1. Online communication strategy in hospitality: design and evaluation of HRM

Applied to eWOM and social networking research since 2010, social exchange theory (SET) proposes that social media plays a pivotal role in influencing organisational and customer behaviour (Shiau and Luo, 2012; Lee et al., 2017; Surma, 2016). Based on psychology, SET has been applied to understanding organisational behaviour (Blau, 1964) and proposes that social behaviour is the result of an exchange process which requires a bidirectional transaction. So, interdependence is a defining characteristic of social exchange (Lee et al., 2017). This reciprocity is based on how social exchange is made through interpersonal behaviour, and it is the most significant factor affecting the benefits of knowledge sharing and exchange (Shiau and Luo, 2012). It can also influence individuals' perceptions of how a particular behaviour should be performed. In this sense, the management of responses to online reviews can be considered as a behavioural/reciprocal exchange motivated both by the intentions behind the review, as well as the potential impact on actual and prospective customers' perceptions and behaviours (Lee et al., 2017).

In addition, SET indicates that individuals usually expect reciprocal benefits, such as reputation and trust, when they act according to social norms (Shiau and Luo, 2012). Managerial responses to reviews could build such trust if they show genuine interest in customers' feedback, responsiveness, appreciation, empathy with customers' concerns, and proactively offer solutions (Lee et al., 2017). Thus, these characteristics should be incorporated in the design and structure of effective HRM.

An analysis of extant literature specific to the hospitality and tourism sector reveals a broad consensus about the relationship between response management and, on the one hand, consumers' review behaviour (Wei et al., 2013; Gu and Ye, 2014; Sparks et al., 2016; Xie et al., 2016; Proserpio and Zervas, 2017; Chevalier et al., 2018; Wang and Chaudhry, 2018; Liu et al., 2021), and, on the other, hotel performance (Xie et al., 2014, 2016, 2017a, 2017b; Kim et al., 2015; Lee et al., 2017; Xie and So, 2018; Lui et al., 2018). Researchers have also analysed the way in which managers should design an online management response strategy (Levy et al., 2013; Sparks and Bradley, 2014; Lee and Blum, 2015; Rose and Blodgett, 2016; Lee et al., 2017; Xie et al., 2017a, 2017b; Chevalier et al., 2018; Liu et al., 2021). However, the results are

inconclusive as to the specific form responses should take. That is, there is not yet a standard way of responding, even among hotels with similar characteristics (brand, class or size).

Most empirical contributions to the literature have evaluated the response policy of hotels to their customers' online comments by means of indicators accessible on online communication platforms or 'third-party sites'. Therefore, quantitative variables predominate (e.g., response rate and response delay) and an indirect view of reviewers' satisfaction with the response received is obtained (Shin et al., 2018; Zhang et al., 2019). By contrast, this study proposes the direct evaluation of customers' opinions once they have received the response to their comments, positive or negative, about their experience in the hotel establishment. The aim is to collect individuals' own perceptions, avoiding the use of generalised patterns of response adequacy (e.g., optimal response speed, optimal number of characters).

In this sense, in accordance with SET, it is necessary to broaden the spectrum of parameters to be considered in the analysis of an adequate management response strategy (Li et al., 2017). In addition to variables widely referenced in the literature for their proven influence on the success of online communication (length of response and delay in responding), a set of qualitative aspects must be evaluated, related to customers' perceptions regarding their own review and the attention received in the hotel's response (tone and style of language and precision of the response in relation to the customer's demands).

Conceptualisation of HRM is approached from a multidimensional perspective. The analysis of the response policy of establishments, properly speaking, is complemented with a second dimension focused on the quality of online communication, which is evidenced by the level of correlation between responses and customers' motivation or intention. In fact, quantitative analyses of management responses would not be complete without considering the quality of responses. Furthermore, it is necessary to understand in greater depth effective management response strategies to co-create value with customers (Xie et al., 2014; Li et al., 2017, 2018).

2.1.1. Response policy

The first dimension of HRM, called 'response policy', includes aspects concerning the length of the response, the time frame and qualitative aspects of the communication such as the emotionality of response, that is, the tone and style of the language used.

Text length of online review responses has been little dealt with in recent literature as a factor to be taken into consideration in hotels' communication policies (Xie et al., 2017a, 2017b). Some authors have analysed length of response considering the number of words, or the number of sentences. Xie et al. (2017b) found that response length was positively associated with future hotel financial performance (hotel revenue and occupancy). By contrast, Xie et al. (2017a) found that longer responses tended to decrease hotel revenue and Li et al. (2017) concluded that longer responses did not enhance either the ratings of reviews or hotel ratings. Thus, there is no consensus that justifies whether shorter or longer responses may positively influence customer satisfaction or hotel performance. However, previous research is mostly based on indirect information extracted from third-party online platforms not directly from customers' own self-assessed perceptions. Thus, to assess response length perceptions directly from customers would allow a more precise determination of this variable's impact on customer satisfaction and hotel performance.

Due to its positive effect on hotel performance, the speed of response (response delay) is another essential factor in a hotel's response strategy, particularly in the case of negative reviews, as a fast response can help restore customer confidence (Levy et al., 2013; Xie et al., 2017a). Also, the speed of managerial response to satisfied customers' reviews can affect their trust and commitment, increasing their loyalty (booking intention) and willingness to pay for the hotel (Xie et al., 2017a). Consistently, Xie et al. (2017b) found that when the average rating of online reviews increased, delayed responses negatively affected hotel

performance. In addition, frequency and speed of hotel response seem to be related to obtaining more reviews, higher ratings and better ranking (Li et al., 2017; Xu et al., 2020). In summary, according to Alrawadieh and Dincer (2019), the promptness of managerial responses is as important as the response itself, especially for full-service and budget hotels. Thus, future research should further analyse appropriate response times (Sparks et al., 2016; Xie et al., 2017a).

Finally, an adequate hotel response policy also depends on its ability to communicate the emotion appropriate to the motivation of the comment and considering customers' sensitivities through the tone (from unpleasant / offensive to cordial/friendly) and style (from informal/colloquial to formal/professional) of the language used in the response. Previous research indicates that the effectiveness of response strategies, in terms of potential customers drawing more positive inferences regarding the hotel's level of concern for its customers, increases if an open, direct and friendly conversational tone is adopted (Sparks et al., 2016; Vignal Lambret and Barki, 2018). However, more research is needed to determine how the tone or "voice" of responses may affect customers' perceptions of hotels and customer reviewing behaviour (Liu et al., 2021).

2.1.2. Quality of responses

The literature has analysed the importance of response policy both in the context of negative reviews, within a service recovery strategy, and to neutral and positive comments, as an opportunity for reinforcing a hotel's online reputation (Levy et al., 2013; Xie et al., 2017b; Alrawadieh and Dincer, 2019). However, the efficacy of managerial responses depends largely on the response content, and this content is suggested to be significantly correlated with customer satisfaction with the response (Alrawadieh and Dincer, 2019).

It is also worth noting that there is a reduction in the benefits of providing timely and lengthy responses if they contain repetition of topics or if management responses do not effectively address customers' concerns (Xie et al., 2014, 2017b; Lee et al., 2017). Accordingly, the level of perceived communication quality of hotel responses is greater for specific vs. generic or unspecific management responses (Wei et al., 2013). Liu et al. (2021) demonstrated that rote responses decrease the volume of subsequent positive reviews, therefore, managers should make efforts to differentiate their responses. Other characteristic like empathy, personalisation, authenticity and compensation must also be considered due to their potential impact on customer satisfaction with the response (Min et al., 2015; Jeong and Lee, 2017; Alrawadieh and Dincer, 2019).

Thus, although management responses are increasingly analysed, the question of their real-world effectiveness remains largely open. Limited research has provided field evidence on the efficacy of a response strategy but has ignored its content. This highlights the importance of semantically tailoring management responses according to the content of the review and to examine the impact of such responses on prospective customers (Li et al., 2018).

In short, there is still some way to go towards the goal of using online reviews for the co-creation of a service experience. Performance implications for hotels' social media communication depend on hotels adopting a strategic perspective to response management (Lee et al., 2017). To do this, HRM should evaluate the degree of correspondence of the response with a customer's concerns and the importance that a customer gives to her or his own comment. In this way, HRM is integrated into online communication that is strategically oriented towards improving service quality and value co-creation (Xie et al., 2014; Lee et al., 2017).

2.2. HRM, response satisfaction and customer promotional behaviour

According to SET, reciprocity in social exchange is the basis for it to be mutually beneficial. In the case of online hotel communication, an effective HRM would favour this reciprocity in that, on the one hand, it

would increase customer satisfaction with the response received and, on the other, it would encourage their positive promotional behaviour (recommend and revisit intention). In addition, such feedback would provide companies with the necessary information to evaluate the effectiveness of their HRM and/or rethink its design if necessary.

In the tourism sector, the literature has focused on the impact that managerial responses have on customer satisfaction and hotel performance. Managing their online reputations through a response management strategy is an effective method for hotels to improve satisfaction, repeat-purchase rates, as well as hotel performance (Schuckert et al., 2019). Moreover, since customer reviews and manager responses are public and visible on travel platforms, this information will help future customers to draw realistic expectations about a possible stay before making their purchase decision (Gu and Ye, 2014).

Specifically, the service recovery literature suggests that an inappropriate HRM to complaints results in poor customer satisfaction ratings and low return intention levels (Sparks et al., 2016). Moreover, Sahin et al. (2017) demonstrate that dissatisfied tourists in five-star chain hotels show negative post-vacation eWOM behaviour by recommending different hotel alternatives, failing to recommend the hotel and expressing that they would not return. For their part, Jeong and Lee (2017) investigated the most feasible recovery responses to influence customers' positive behavioural intentions. They identified that both authenticity and compensation played key roles in service recovery strategy by increasing customer trust and satisfaction and promoting return intentions.

This study intends to advance in this line of analysis through the following contributions. First, it determines the impact of HRM on customers' promotional behaviour. This indicator of future customer behaviour, in terms of revisiting or recommending the hotel, has a direct impact on hotel performance. It is known that in hotels, service innovation is based on interactive and relational elements. However, how hotels can transform innovative service into customer promotional behaviour is a subject that needs much more research (Subramanian et al., 2016). Moreover, an evaluation of the effectiveness of HRM is more accurate considering the effect of all types of reviews, not just complaints and service recovery perspectives.

Second, in this study, customer satisfaction is measured directly through the response received to their comments, instead of indirectly evaluating it through overall satisfaction with the service. The direct measurement of customer satisfaction with a hotel's online communication instrumentalizes HRM monitoring by management, becoming an indicator of the effectiveness of each hotel's HRM.

Based on the two-dimensional conceptualisation of HRM developed in the previous section, two main hypotheses are proposed related to monitoring HRM effectiveness:

H1. A hotel's response strategy (HRM) influences a customer's intention to promote the establishment (Promotional Behaviour).

H2. A hotel's response strategy (HRM) influences customer satisfaction with the response (Response Satisfaction).

Trust is a central component of SET, and it affects overall service quality and customer satisfaction with e-service quality (Shiau and Luo, 2012). Therefore, hypotheses H1 and H2 allow us to assess HRM via perceptions of customer satisfaction and trust in online communication, through the direct measurement of customer satisfaction with and trust in online communication, and customer response satisfaction and promotional behaviour.

Both the relationships tested in H1 and H2 will be affected by moderator variables that are mentioned below, giving rise to the corresponding sub-hypotheses.

2.3. Moderating effects

In the analysis of the relationship between management response

strategy and hotel performance, the moderating effect of certain contextual variables (hotels and/or reviewers' characteristics) need to be investigated due to their potential effects on the direction and/or strength of this relationship (Xie et al., 2017a). Therefore, it is necessary to collect data and include factors that may affect a company's choice of specific management responses (Li et al., 2018) as well as on customers' reviewing behaviour (Liu et al., 2021).

The study of moderating effects is approached as an extension of SET, as it allows for a more precise determination of the factors that influence customers' perceptions of a hotel's online communication. This information brings value to the company because it broadens knowledge of the determinants of customers' perceptions, identifying the differences that may originate in these perceptions according to the intrinsic characteristics of reviewers (comment relevance, polarity, reviewer's experience, age and gender) and/or contextual factors (rating), including some elements controllable by the hotel (e.g., job position of responder). According to SET, this means an improvement in knowledge sharing and exchange, which translates into a greater capacity of the hotel to design its organisational behaviour, more specifically, its HRM. Thus, moderating effects are an important topic to advance in research to monitor HRM and its effectiveness in terms of customer satisfaction and promotional behaviour.

2.3.1. Profile of the responder

The job position of the person who responds to online reviews is likely to play an essential role in a hotel's communication strategy. Even so, there is little previous research about this key factor and its effect on organisational outcomes is poor and contradictory (Levy et al., 2013; Sparks and Bradley, 2014; Sparks et al., 2016; Xie et al., 2017a, 2017b). Results from Xie et al. (2017a) and Xie et al. (2017b) suggest that customers do not necessarily appreciate responses from management in executive positions, rather, they would likely perceive responses by functional staff as more relevant, less generic, and more helpful in their decision making. In the case of dissatisfied customers, position in the organisation might play an important role, because Levy et al. (2013) found that several hotel response strategies were influenced by the level of management control over the complaint. Furthermore, Xie et al. (2017b) found differences between lower category hotels, where executives' responses were recommended, and higher-category ones, in which front line managers' responses were more effective.

However, Sparks et al. (2016) did not find a significant moderator effect for "source of response" (general manager vs. customer service agent) on the relationship between hotel responses to negative reviews and customer inferences of trust and concern. They argued that potential customers might perceive job position of responder just as a cue to draw favourable perceptions, such as a responder who is credible, empowered and expert. Thus, the potential effect of 'source of response' must be investigated further (Liu et al., 2021). Accordingly, the following hypotheses are proposed:

H$_{1.1}$. The relationship between a hotel's response strategy (HRM) and a customer's intention to promote the establishment (Promotional Behaviour) will vary according to the job position of the person who responds.

H$_{2.1}$. The relationship between a hotel's response strategy (HRM) and customer satisfaction with the response (Response Satisfaction) will vary according to the job position of the person who responds.

2.3.2. Hotel rating score

Travellers' reliance on third-party websites like Tripadvisor throughout their travel planning and decision-making processes is increasing (Alrawadieh and Dincer, 2019). In general, customer ratings are considered a reliable reflection of hotel service quality (Xie et al., 2014) and a predictor of hotel performance, therefore online reputation is a particularly relevant parameter to protect hotel brands and increase financial performance (Kim et al., 2015; Alrawadieh and Dincer, 2019).

Customers' booking decisions are influenced by ratings in online reviews (Alrawadieh and Dincer, 2019). Therefore, with their reviews and ratings, customers are now in a position to influence both peer-customer behaviour and companies' operational models (Alrawadieh and Dincer, 2019). Thus, while previous research has evaluated the moderating effect of management responses on the relationship between hotels' overall rating and hotel performance (Xie et al., 2014), it is now necessary to assess if customers' hotel rating moderates the effectiveness of HRM. To do this, the following hypotheses are proposed:

H$_{1.2}$. The relationship between a hotel's response strategy (HRM) and a customer's intention to promote the establishment (Promotional Behaviour) will vary according to the score given to the establishment (rating score).

H$_{2.2}$. The relationship between a hotel's response strategy (HRM) and customer satisfaction with the response (Response Satisfaction) will vary according to the score given to the establishment (rating score).

2.3.3. Profile of reviewer (age, gender and experience)

Reviewers' characteristics are considered a good predictor of review helpfulness to customers' decision process (Lee et al., 2018). It may also shape hotels' decisions about their response strategy (Li et al., 2018). In addition to socio-demographic aspects such as age and gender (Bore et al., 2017), other characteristics like reason for the trip or geographic location can moderate the influence of HRM on hotel performance (Levy et al., 2013). We extend the current literature by considering customers' experience in reviewing on social media (e.g., the level of reviewer assigned by TripAdvisor: level null; level 1; level 2; … level 6). This factor could affect customers' attitude and receptivity, so it could impact on their satisfaction with HRM. So far, the literature has studied the impact of reviews given by reviewers with experience (Xie and So, 2018), mainly in terms of the utility of the information contained for readers' decisions or 'review helpfulness' (Huang et al., 2015; Zhang et al., 2020). However, few studies have addressed the management of responses specifically aimed at experienced reviewers, although some business benefits (reputation, popularity and financial performance) are enhanced if hotels target more expert reviewers when providing responses to online reviews (Xie and So, 2018).

Therefore, the following hypotheses are proposed to evaluate the moderating effect of the profile of reviewer on HRM effectiveness:

H$_{1.3}$. The relationship between a hotel's response strategy (HRM) and a customer's intention to promote the establishment (Promotional Behaviour) will vary according to the reviewers' age.

H$_{1.4}$. The relationship between a hotel's response strategy (HRM) and a customer's intention to promote the establishment (Promotional Behaviour) will vary according to the reviewer's gender.

H$_{1.5}$. The relationship between a hotel's response strategy (HRM) and a customer's intention to promote the establishment (Promotional Behaviour) will vary according to the reviewer's experience.

H$_{2.3}$. The relationship between a hotel's response strategy (HRM) and customer satisfaction with the response (Response Satisfaction) will vary according to the reviewer's age.

H$_{2.4}$. The relationship between a hotel's response strategy (HRM) and customer satisfaction with the response (Response Satisfaction) will vary according to the reviewer's gender.

H$_{2.5}$. The relationship between a hotel's response strategy (HRM) and customer satisfaction with the response (Response Satisfaction) will vary according to the reviewer's experience.

2.3.4. Online review polarity

The positive or negative sense of a review ('polarity') represents another influential factor in online review literature (Levy et al., 2013; Xie et al., 2014; Sparks and Bradley, 2014; Lee and Blum, 2015; Rose

and Blodgett, 2016; Lee et al., 2017; Chevalier et al., 2018; Wang and Chaudhry, 2018; Zhang et al., 2020). However, the efficacy of managers' different response strategies deserves further research, for example, investigating review valence (polarity) as a factor that could influence HRM effectiveness (Zhang et al., 2020).

Research has also recently centred on the relationship between polarity and review helpfulness, i.e., if the review provides valuable information and affects a future customer's decision (Lee et al., 2018). However, results have been inconclusive so far. On the one hand, Lee et al. (2018) found that review sentiment is a poor predictor of its helpfulness, on the other, Banerjee and Chua (2019) indicated that customers' perception of reviews and their decision to trust differed significantly across review polarity. Overall, there is scarce evidence about how the sense of customer reviews (negative, positive, neutral) affects their own perception of hotels' responses to their comments.

In addition, methodological limitations must be considered. Zhang et al. (2020) conducted an experiment to explore the best combination of review valence (positive/negative/neutral), response channel (public/private) and type of explanation (explained action/explained reaction) to improve the effectiveness of managers' responses, in terms of the focal customer's' expectations. Previously, Wei et al. (2013) examined the effectiveness of hotels' responses finding that, in case of negative reviews, the levels of trust and perceived quality of communication were greater for specific (vs. generic) management responses. However, these levels did not vary when reviews were positive. Nevertheless, in experimental analysis, findings are based on hypothetical situations, not on collecting the perceptions of real reviewers regarding hotels' responses and the impact on their own satisfaction and promotional behaviour. To cover this gap, the following hypotheses are proposed to determine if review polarity affects the effectiveness of HRM:

H$_{1.6}$. The relationship between a hotel's response strategy (HRM) and a customer's intention to promote the establishment (Promotional Behaviour) will vary according to the positive or negative polarity of the review.

H$_{2.6}$. The relationship between a hotel's response strategy (HRM) and customer satisfaction with the response (Response Satisfaction) will vary according to the positive or negative polarity of the review.

2.3.5. Comment relevance

Finally, as a novelty with respect to previous research, this study aims to measure the potential moderating effect of a customer's perception of the relevance of the review they made. It is logical to suggest that the relevance that customers attribute to their own comments could influence their perception of the response received, so, testing the following hypotheses is proposed:

H$_{1.7}$. The relationship between a hotel's response strategy (HRM) and a customer's intention to promote the establishment (Promotional Behaviour) will vary according to the relevance of the comments.

H$_{2.7}$. The relationship between a hotel's response strategy (HRM) and customer satisfaction with the response (Response Satisfaction) will vary according to the relevance of the comments.

In summary, drawing upon SET, in this study, the modelling of effective HRM by testing the proposed hypotheses would allow the monitoring of the overall quality of HRM by means of exchanges between hotels and customers.

3. Methodology

3.1. Research model

In the model proposed in Fig. 1, a hotel's response management (HRM) is a two-dimensional construct that is specified as a direct antecedent of the intention to promote an establishment (Promotional Behaviour) and the satisfaction with responses (Response Satisfaction) on the part of customers who, after a stay, made a comment on a travel platform and received a response. In turn, the effect of seven moderating variables on the relationship between response management (HRM) and the two dependent variables, Promotional Behaviour and Response Satisfaction, are incorporated into the model.

Based on the literature review, the hypotheses to be tested are summarised:

H1. A hotel's response management (HRM) influences a customer's intention to promote the establishment (Promotional Behaviour) and, in turn, this relationship will vary according to the job position of the person who responds (H$_{1.1}$); hotel rating score (H$_{1.2}$); reviewer's age (H$_{1.3}$); reviewer's gender (H$_{1.4}$); reviewer's experience (H$_{1.5}$); the positive or negative polarity of the review (H$_{1.6}$) and the relevance of the comments (H$_{1.7}$).

H2. A hotel's response management (HRM) influences customer satisfaction with the response (Response Satisfaction) and, in turn, this relationship will vary according to the job position of the person who responds (H$_{2.1}$); rating score (H$_{2.2}$); reviewer's age (H$_{2.3}$); reviewer's gender (H$_{2.4}$); reviewer's experience (H$_{2.5}$); the positive or negative polarity of the review (H$_{2.6}$) and the relevance of the comments (H$_{2.7}$).

3.2. Measurement development

From the research model proposed in Fig. 1, we proceed with the identification of the domain of the constructs to delimit and conceptualise each of their dimensions, according to literature review, and to build corresponding multi-items measurement scales (Churchill, 1979).

Hotel Response Management (HRM) represents the ability to effectively manage online communication in hotel establishments. Since the relevant literature does not provide scales on this construct, and it may have different underlying dimensions (e.g., online platform used by the customer, nature of review; empathy; trustworthiness; environmental
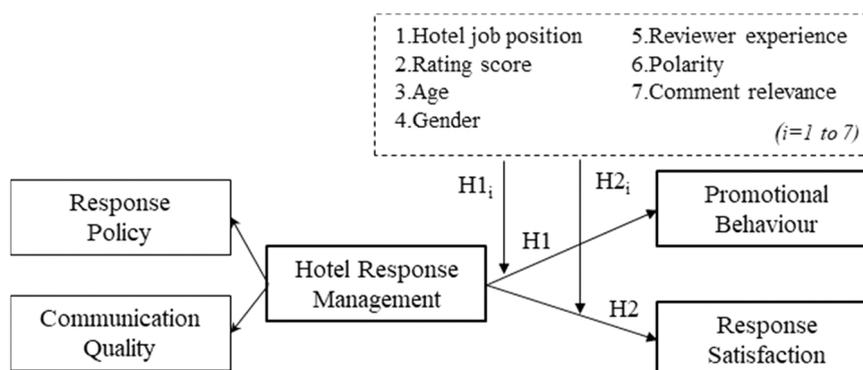

Fig. 1. Research model.

effort; among others), to develop a generalisable HRM measure, we consider two dimensions for quality and policy of online communication: Communication Quality and Response Policy.

Communication Quality (HRM1) represents customers' perceptions of this hotel service. For its evaluation, three items are used that measure the reviewer's appreciation of the degree of importance that the hotel give to their comment (*mr11*), as well as the influence on both the quality of the service (*mr12*) and a possible improvement in their evaluation of the establishment (*mr13*). These items were adapted to our context from the "Motivations of management responses" scale by Wei et al. (2013) and the "Interactional justice" scale by Yoo (2018).

Response Policy (HRM2) refers to customers' perceptions of what and how the person in charge of the establishment responds to comments. Given that a valid scale does not exist for this construct, we developed four items to measure the reviewer's perception of the length (*mr21*), the time elapsed in obtaining a response to their comment (*mr22*), the tone (*mr24*) and the style of the response (*mr23*). All of these have been used as quantitative variables in previous studies (e.g., Sparks et al., 2016; Xie et al., 2017a, 2017b; Zhang et al., 2019).

Promotional Behaviour measures the intention to promote the establishment that has been reviewed and represents a dependent variable of the response strategy. To measure this construct, two items adapted from "Repurchase intention" and "Intention to revisit" scales by Yoo (2018) and from "Revisit intention" and "Recommendation intention" scales developed by Chen et al. (2020) are used to evaluate the influence of the response on the intention to revisit (*pro1*) and to recommend (*pro2*) the hotel.

Response Satisfaction is a variable that represents the degree of satisfaction with the response received from the hotel to a previous comment on an online travel platform. To measure the construct, three satisfaction measures adapted from the "Satisfaction with response" scale by Min et al. (2015) and from "Service recovery satisfaction" scale by Yoo (2018) are used. These items assess the adequacy of the response to the comment (*sat1*), a general satisfaction measure (*sat2*), and the score that would be awarded to the establishment after receiving the response (*sat3*).

To measure customers' perceptions, a 7-level Likert scale was used (1: totally disagree to 7: totally agree; 1: very dissatisfied to 7: very satisfied). In the case of the general score given to the hotel (rating score), before and after receiving the response, a scale of interval between 1 and 5 was used. Finally, classification items were included with the purpose of testing their potential moderating effects: position held by the person responsible for responding to the hotel (hotel job position); score given to hotel when making the comment (rating score); age; gender; the positive or negative sense of the comment (polarity); frequency of reviews by customer (reviewer's experience); and implicit relevance of subject (comment relevance).

3.3. Data collection and processing

This study analyses hotel guests who, after a stay, made a comment on a travel platform and received a response. We performed a manual search of participants in a sample of more than one thousand reviews (positive and negative) written in English or Spanish on TripAdvisor, covering more than 250 four and five-star hotels in the Canary Islands (Spain). The Canary Islands are one of the main tourist destinations in Spain with 13.8 million international tourist arrivals in 2018 and a tourism sector which contributes 35% to the regional GDP and 40.4% of employment.

The process began by choosing one of the hotels selected for the study. The next step was to access one of the categories of reviews classified according to the rating given, which in TripAdvisor are: excellent, very good, average, bad and lousy (scored from 5 to 1). Once within the category (e.g., scored with 3), a recent review was randomly selected, and the reviewer's registration information was located. This process of identifying potential participants was repeated for all five

rating categories used by TripAdvisor. Finally, each reviewer was sent a message with an invitation to participate in the study and the link to a self-administered electronic questionnaire in Spanish and English.

The data collection was carried out from February to May 2020, and a total of 502 customers were contacted. Once those people whose comments were not answered by the hotel were eliminated, a final sample of 244 valid surveys were obtained for statistical analysis. The characteristics of the sample are summarised in Table 1.

3.4. Data analysis and results

For the statistical analysis, a multivariate analysis technique based on Partial Least Squares (PLS) was used, which is characterised by a process of estimating the parameters of a research model in two stages. First, there is an analysis of the measurement model and, second, an analysis of the structural model. Data analysis was performed by SmartPLS 3 software.

3.4.1. Assessment of measurement model

In this first stage of the process, we specified two measurement models (Mod1 and Mod2) in which the HRM variable is represented as a second-order reflective construct related to two other dimensions: Communication Quality (HRM1) and Response Policy (HRM2). The estimation of the most important measurement model metrics, that is, reliability, convergent validity, and discriminant validity of both models was carried out using a two-stage approach. In reflective measurement models, item assessment involves examining their loadings. Loadings above 0.708 are recommended, as they indicate that the construct explains more than 50% of the indicator's variance, thus providing acceptable item reliability. Nonetheless, several researchers think this rule of thumb should not be as rigid at the early stages of scale development, and loadings above 0.5 are regarded as acceptable (Chin, 1998). After estimating the parameters of the first model in the first stage, items mr11 (Importance given by the hotel to the comment) and mr23 (the more or less formal style of the response) were eliminated as their external loadings had values lower than 0.50. However, it was decided to keep item mr24 with a λ equal to 0.56, since although it does not reach the minimum recommended value of 0.708 (Hair et al., 2019), in the initial stages of scale development, it is considered acceptable to

Table 1
Sample characteristics.

	Frequency	%	Mean	StDv
Hotel_job_position[a]			2.66	1.18
Top Manager	41	18		
Customer Att./Other	183	82		
Rating score[b]			3.87	1.09
Low	71	32		
High	153	68		
Age			1.41	0.5
< 35	134	60		
≥ 35	90	40		
Gender			1.71	0.46
Male	66	29		
Female	158	71		
Reviewer's experience[c]			1.88	0.76
Low	81	36		
High	143	64		
Polarity			1.43	0.71
Positive	155	69		
Negative	69	31		
Comment relevance[d]			2.56	1.98
Low	121	54		
High	103	46		

[a] Likert 4 (1 Top Manager and 2–4 Customer Attention; other department; DK/NA).
[b] Likert 5 (1–3 Low score and 4–5 High score).
[c] Likert 3 (1 Low and 2–3 High).
[d] Likert 7 (< 4 Low relevance and ≥ 4 High relevance).

maintain weak indicators based on their contribution to content validity (Hair et al., 2011). Regarding the second model, all the estimated indicators reached loadings higher than 0.72, so no item was eliminated from the model.

In the second stage, Mod1 and Mod2 were re-estimated with their corresponding latent variables. The results confirm the individual reliability of the indicators used in each of the two models ($\lambda \geq 0.708$). To assess the internal consistency reliability, Cronbach's alpha and composite reliability are the most often used and have similar thresholds. However, Cronbach's alpha produces lower values and is less precise than composite reliability. Thus, the construct's true reliability is typically viewed as within these two values, considering that values between 0.70 and 0.90 range are considered satisfactory (Hair et al., 2019). Results summarised in Table 2 show both Cronbach's alpha and composite reliability values are adequate and always within the desirable limits in

Table 2
Assessment results of the measurement model.

Construct/associated items	Loading (λ)	CA	CR	AVE	R^2	Q^2
Mod 1						
HRM1: Communication Quality		0.81	0.91	0.83		
mr12: Online communication increases the quality of service	0.86					
mr13: The response received would improve my rating of the hotel	0.96					
HRM2: Response Policy		0.76	0.84	0.65		
mr21: The extension (length) of the reply message	0.86					
mr22: The time frame in which it was answered	0.95					
mr24: The more or less cordial tone of the answer	0.56					
Promotional Behaviour		0.76	0.90	0.81	0.20	0.15
pro1: The response influences my intention to repeat the visit	0.89					
pro2: The response influences my intention to recommend the hotel	0.91					
Mod 2						
HRM1: Communication Quality		0.75	0.85	0.66		
mr11: Importance given by the hotel to the comment	0.80					
mr12: Online communication increases the quality of service	0.88					
mr13: The response received would improve my score to hotel	0.75					
HRM2: Response Policy		0.82	0.88	0.65		
mr21: The extension (length) of the reply message	0.87					
mr22: The time frame in which it was answered	0.77					
mr23: The more or less formal style of the answer	0.82					
mr24: The more or less cordial tone of the answer	0.76					
Response Satisfaction		0.82	0.89	0.74	0.64	0.45
sat1: The answer was satisfactory	0.72					
sat2: Degree of general satisfaction with the response	0.94					
sat3: Rating I would give to hotel after receiving the response	0.90					

CA: Cronbach's alpha; CR: composite reliability; AVE: average variance extracted.

the three constructs of Mod1 and Mod2 ($0.70 \leq \rho c \leq 0.90$). Consequently, the internal consistency of the indicators that measure each construct is confirmed.

Next, we assessed the convergent validity with the average variance extracted (AVE), which measures the amount of variance that is captured by a construct in relation to the amount of variance due to measurement error. Values greater than 0.5 are acceptable, indicating that the construct explains at least 50% of the variance of its items. Results in Table 2 allow us to confirm the convergent validity of the constructs.

To assess discriminant validity and determine the extent to which a construct is empirically distinct from other constructs in the structural model, we applied Fornell-Larcker criterion. According to this, the amount of variance that a construct captures from its indicators (AVE) should be greater than the variance that the construct shares with other constructs in the model. Moreover, considering that recent research indicates that the Fornell-Larcker criterion does not perform well in all cases, we also estimated the heterotrait-monotrait (HTMT) ratio of the correlations proposed by Henseler et al. (2015). This indicator is defined as the mean value of the item correlations across constructs relative to the mean of the average correlations for the items measuring the same construct. Henseler et al. (2015) propose a threshold value of 0.90 for structural models with constructs that are conceptually very similar. Therefore, the results in Table 3 confirm an acceptable discriminant validity between constructs in both models.

3.4.2. Assessment of structural model

After confirming the quality of the measurement model in terms of reliability and validity of the items used to measure the constructs, the next step was to analyse the structural model.

First, possible multicollinearity problems were ruled out when verifying that all variance inflation factor (VIF) values were close to 3 or lower (Hair et al., 2019). And second, a non-parametric bootstrapping technique with 5000 resamples was used to obtain the statistics that allow us to evaluate the structural model by means of a) the coefficient of determination (R^2); b) the statistical significance and relevance of the standardised path coefficients (β), and c) the blindfolding-based cross-validated redundancy measure (Q^2).

The predictive capacity of the model was analysed through the determination coefficient (R^2) that represents the amount of variance of a construct explained by its predictor variables, so that adjusted R^2 values greater than or equal to 0.1 are considered adequate. Nevertheless, the R^2 should always be interpreted in relation to the context of the study and the complexity of the structural model considering that the R^2 is a function of the number of predictor constructs (the greater the number of predictor constructs, the higher the R^2). In our case, bearing in mind that there is only one predictor variable of the Promotional Behaviour and Response Satisfaction constructs, the R^2 values obtained establish a weak ($R^2 = 0.18$) and substantial ($R^2 = 0.63$) predictive power of the structural models Mod1 and Mod2, respectively (see Table 2). That is, HRM is a better predictor of Response Satisfaction than of Promotional Behaviour.

The interpretation of the standardized path coefficients (β) and the associated p-values confirmed a positive and statistically significant relationship between the constructs since, following Chin (1998), values of β equal to or greater than 0.2 were obtained (see Fig. 2). Consequently, hypotheses H1 and H2 are confirmed.

Finally, another assessment measure of the structural model's predictive accuracy is Stone-Geisser's Q^2 value. As a rule of thumb, Q^2 values higher than 0, 0.25 and 0.50 depict small, medium, and large predictive relevance of the PLS-path model (Hair et al., 2019). In our study, predictive relevance was also confirmed, since Q^2 values greater than zero in both endogenous constructs (Promotional Behaviour and Response Satisfaction) showed satisfactory predictive relevance of the structural model (see Table 2).

Table 3
Discriminant validity.

Constructs	Mod 1			Mod 2		
	HRM1	HRM2	Promotional Behaviour	HRM1	HRM2	Response Satisfaction
Fornell-Larcker[a]						
HRM1	*0.91*			*0.81*		
HRM2	0.34	*0.81*		0.66	*0.80*	
Promotional Behaviour	0.38	-0.09	**0.90**			
Response Satisfaction				0.70	0.75	*0.86*
HTMT[b]						
HRM2	*0.51*			*0.79*		
Promotional Behaviour	0.46	*0.09*				
Response Satisfaction				*0.83*	*0.89*	

[a] The diagonal shows the square root of AVE.
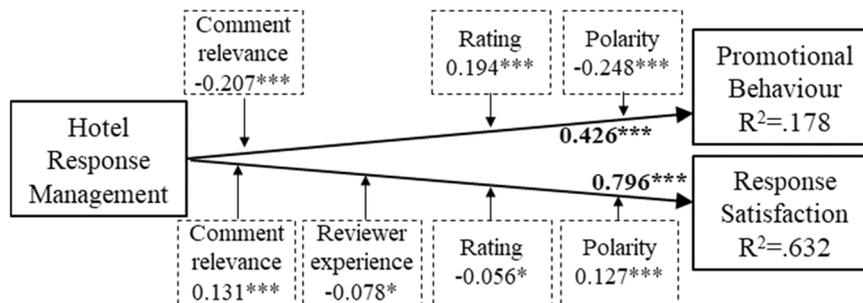[b] Correlations of the two lower-second order components are below of 0.90.

Fig. 2. Results.

3.4.3. Moderator effect analysis

In order to test the proposed sub-hypotheses (H1.i and H2.i; where i = 1–7) an analysis of the moderating effect of the variables was carried out that. This is based on the theory, they could influence the relationship of the response strategy of the hotel (HRM) with Promotional Behaviour and Response Satisfaction. Previously, the f^2 statistic was calculated to determine the size of the effect that these moderating variables exert on the relationship established in hypothesis 1 (HRM => Promotional Behaviour), as well as in hypothesis 2 (HRM => Response Satisfaction). As a rule of thumb, values higher than 0.02, 0.15 and 0.35 depict small, medium and large f^2 effect sizes (Chin, 1998). In the results shown in Table 4, effects greater than or equal to 0.02 can be observed in half the cases.

$$f^2 = \frac{R^2_{included} - R^2_{excluded}}{1 - R^2_{included}}$$

Afterwards, a procedure based on the product of indicators was used to determine the significance and size of the indirect effects using bootstrapping with 5000 resamples. After estimating the parameters for each of the moderating variables in both models, a summary of the results is shown in Table 4.

The results of the analysis of the moderating effects confirm 7 of the 14 established sub-hypotheses.

Regarding the second moderating variable relative to the rating given to the establishment, the Rating score is significant and positive in the relationship HRM => Promotional Behaviour (β = 0.194; $p < 0.001$) and negative in HRM => Response Satisfaction

Table 4
Results of hypothesis testing.

Hypothesis	Relationships	Path		Confidence Interval (95%)	f^2	Effect size	Supported
H1	HRM => Promotional Behaviour	0.426	***	[0.290; 0.525]			Yes
Moderator effect							
H1.1	HRM*Job_position => Pro_Behav	-0.113	ns	[− 0.248; 0.089]	–	None	
H1.2	HRM*Rating score => Pro_Behav	0.194	***	[0.087; 0.290]	0.05	Small	Yes
H1.3	HRM*Age => Pro_Behav	0.046	ns	[− 0.149; 0.205]	–	None	
H1.4	HRM*Gender => Pro_Behav	-0.083	ns	[− 0.229; 0.132]	–	None	
H1.5	HRM*Reviewer experience =>Pro_Behav	0.068	ns	[− 0.135; 0.208]	–	None	
H1.6	HRM*Polarity=> Pro_Behav	-0.248	***	[− 0.367;− 0.122]	0.06	Small	Yes
H1.7	HRM*Comment relevance=> Pro_Behav	-0.207	***	[− 0.306;− 0.093]	0.05	Small	Yes
H2	HRM => Response Satisfaction	0.800	***	[0.734; 0.842]			Yes
Moderator effect							
H2.1	HRM*Job_position => Res_Satisf	0.008	ns	[− 0.087; 0.092]	–	None	
H2.2	HRM*Rating score => Res_Satisf	-0.056	*	[− 0.106;− 0.004]	0.73	Large	Yes
H2.3	HRM*Age => Res_Satisf	0.009	ns	[− 0.120; 0.128]	–	None	
H2.4	HRM*Gender => Res_Satisf	-0.026	ns	[− 0.209; 0.034]	–	None	
H2.5	HRM*Reviewer experience => Res_Satisf	-0.078	*	[− 0.169;− 0.021]	0.02	Small	Yes
H2.6	HRM*Polarity=> Res_Satisf	0.127	***	[0.055; 0.196]	0.18	Medium	Yes
H2.7	HRM* Comment relevance=> Res_Satisf	0.131	***	[0.072; 0.192]	0.15	Medium	Yes

Significance level: *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; ns no significance.

($\beta = -0.056$; $p < 0.05$), which confirms hypotheses $H_{1.2}$ and $H_{2.2}$. From this result, it can be deduced that in the face of comments with high evaluations (rating score ≥ 4), an adequate HRM strategy may promote an attitude or predisposition to repeat the visit to the establishment or recommend it.

Regarding the fifth moderating variable, the experience of customers who make comments on tourist platforms (Reviewer's experience), the model shows a negative and significant moderating effect on the relationship HRM and Response Satisfaction ($\beta = -0.078$; $p < 0.05$). Consequently, hypothesis $H_{2.5}$ is confirmed, and it is established that regarding "reviewers" with more experience, the effectiveness of an adequate HRM strategy in satisfaction with the response decreases. To the contrary, a reviewer's experience is not a factor to consider in the relationship between HRM and Promotional Behaviour, since the value of the path coefficient is low and not significant, which implies rejecting hypothesis $H_{1.5}$.

The sixth variable measures the perception about the positive or negative character of the comment (polarity). The result of the moderating effect also confirms hypotheses $H_{1.6}$ and $H_{2.6}$, insofar as significant path coefficients are obtained both in the relationship HRM and Promotional Behaviour ($\beta = -0.248$; $p < 0.001$) and in the relationship HRM and Response Satisfaction ($\beta = 0.127$; $p < 0.001$). Thus, in a context of negative messages, an appropriate HRM strategy would not improve the intention to repeat or recommend the establishment, but it would positively influence satisfaction with the response.

The result of the moderating effect of the seventh variable that evaluates the more or less serious nature of the comment (Comment relevance) shows that it exerts a statistically significant moderating effect with a negative sign between HRM and Promotional Behaviour ($\beta = -0.207$; $p < 0.001$), from which it follows that the greater the relevance of the comment, the lower the predictive power of HRM with respect to Promotional Behaviour. The opposite occurs in the relationship between HRM and Response Satisfaction, that is, the relevance of the comment exerts a significant and positive effect ($\beta = 0.131$; $p < 0.001$), so that as the perception of relevance increases in the comment made, the greater the influence of the HRM strategy on satisfaction with the response. Consequently, hypotheses $H_{1.7}$ and $H_{2.7}$ are confirmed.

Finally, the results of the analysis of the moderating effect of the variables used to categorise: a) the position of the person in the establishment who responds to the messages (*Hotel job position*); b) reviewer's age (< 35 vs ≥ 35), and c) gender (*male* vs *female*) ratify the values equal to or close to zero of the f^2 statistic to measure the effect size (see Table 4). Therefore, hypotheses $H_{1.1}$, $H_{2.1}$, $H_{1.3}$, $H_{2.3}$, $H_{1.4}$ and $H_{2.4}$ are not confirmed, and it is established that these variables do not affect an establishment's response strategy.

4. Discussion and conclusions

4.1. Theoretical implications

This paper analyses the way HRM influences promotional behaviour and response satisfaction. Moreover, HRM is performed using a two-dimensional structure which allows to separate the influence of the response itself (length, style, delay) from the perceived quality of the response using primary data from reviewers, themselves, and considering the effect of a set of moderating variables. Thus, this paper contributes to expand existing theoretical conceptualisation in the area of response management in several ways.

First, the paper proposes a two-dimensional configuration of HRM, which is confirmed by the analysis. The dimensions of *quality of online communication* and *response policy* allow a more precise configuration of an adequate response strategy to customers' online reviews. According to Xie et al. (2014) and Lee et al. (2017), the measurement of HRM accuracy or its tailoring is an emerging research field with relevant implications for hotel performance.

Second, the effectiveness of HRM in terms of satisfaction with the response and promotional behaviour are analysed, considering not just service failures as Jeong and Lee (2017) or Alrawadieh and Dincer (2019) but all levels of satisfaction with the service. The results confirm that HRM has a significant and positive influence on customer satisfaction with hotel communication and on customers' intention to repeat the visit or recommend the establishment. Therefore, the model considers the indirect effect of HRM on potential customers via the recommendations of actual customers, considering the peer-induced effect stated in Gu and Ye (2014).

Third, the results confirm those of Liu et al. (2021), i.e., communication quality is an essential dimension that determines HRM effectiveness. Moreover, this paper has contributed by considering the perceptions that hotel guests themselves express regarding the quality of the response to their comments. This direct measurement of customer satisfaction with online communication (as opposed to indirect measurement through satisfaction with the global service or rating score) is key to monitoring the HRM strategy validated in this model. The use of such primary data about perceptions of the reviewers provides extra robustness to the results. It also contributes to the research need identified by Li et al. (2018), who analyse the effectiveness of responses by considering the content of responses, but with the limitation of being an experimental study. Thus, our results extend the extant literature by assessing the impact of a two-dimensional HRM structure that evaluates communication policy from users' own direct perceptions of the quality of the policy. Using this structure, we can evaluate the effectiveness of HRM in terms of satisfaction with the response received and intention to repeat and recommend the hotel.

Fourth, regarding the research gap delimited by Li et al. (2018), this paper contributes by adding moderator variables that may influence HRM effectiveness in terms of satisfaction with the response and revisiting and recommending intention. These are aspects conditioned by customers in which the hotel has room for manoeuvre or ability to manage, such as the negative or positive sense of the comment (polarity) and the overall score the customer gives the establishment on the platform (rating score), and intrinsic aspects of customers, such as their experience as reviewers and the importance they attach to their own comment, complaint or query (comment relevance). Regarding the latter, the novelty of demonstrating the moderating effect of *comment relevance* stands out, an aspect not tested so far in previous research, thus contributing to knowledge about the factors that influence the HRM - hotel performance relationship. With respect to polarity and reviewers' experience, this study complements the previous literature that has extensively focused on the effect of these factors on future customers' decisions (Lee et al., 2018). Indeed, we evaluate their impact on HRM effectivity through actual customer perceptions.

Finally, the results contribute to confirm the social exchange theory. Given the plausible interdependency between management response and online reviews, there might be conditions under which providing management responses may enhance or damage a hotel's performance (Lee et al., 2017). Thus, the evaluation of the effectiveness of HRM tested in this work through hypotheses H1 and H2 is evidence of a reciprocal and beneficial knowledge sharing and exchange between reviewing customers and responding managers, in an online communication context. So, we extend the empirical evidence of SET, mainly focusing on interpersonal social exchange between customers and exchange between employees and employers (Shiau and Luo, 2012) advancing in research about the mutual benefits to hotels and customers of effective social exchange. Additionally, specific monitoring can be performed via the moderating variables to achieve a more effective exchange in online communication between a hotel and its customers. This reciprocal and mutually satisfactory exchange is precisely what allows a hotel to design its HRM in a more "fine-tuned" way. This is consistent with Chevalier et al. (2018), who underlines that understanding the effect of online managerial response on consumers' perceptions sheds light on what motivates them to post feedback that can

help companies improve their response strategy as well as help readers of reviews to make better decisions and stimulate reviewing activity. So, as well as an interpersonal social exchange, there is a reciprocal and beneficial knowledge sharing and exchange between companies and customers through online communication. Therefore, this paper provides evidence of the applicability of the SET in the co-creation of value for companies through its online communication strategy.

4.2. Practical implications

This paper has several managerial implications. The results provide relevant information about how customers react to hotels' responses in terms of satisfaction with the response itself and in terms of revisiting and recommendation intention. Thus, managers are provided with a tool that can monitor a hotel's response strategy and its impact on customers.

Xie et al. (2017b) point out the need for additional research on the aspects of management responses that can contribute to financial performance. This has critical managerial implications because managers would benefit greatly from information concerning what strategies and communication techniques would enhance their financial performance. The monitoring provided by our model contributes directly to filling this gap. On the one hand, the two-dimensional structure for evaluating HRM of an establishment proves its effectiveness in terms of customer satisfaction with the response and impact on customers' promotional behaviour. On the other hand, the analysis of the moderating effects provides essential information on what aspects influence the effectiveness of a hotel's response strategy.

Regarding the first point, the two-dimensional structure of HRM is very useful for management to design their response protocols to online reviews. In this sense, aspects such as the delay in the response (mr22), customers' perceptions of the influence of the response received on their overall assessment of the hotel (mr13) and the impact of online communication on improving the overall quality of the hotel service (mr12) are the variables that play the greatest role in a HRM policy. Furthermore, the validated two-dimensional structure indicates that an effective HRM policy must be capable of transmitting the emotion appropriate to the motivation of the comment, and the customer's sensitivity through the tone and style of the language used in the response (Li et al., 2017). Likewise, the relevance of the response delay is consistent with that indicated by Xie et al. (2017b).

Secondly, the confirmation of hypotheses H1 and H2 shows the dependency relationships tested in this study. Thus, it is confirmed that HRM applied by an establishment exerts a significant and positive influence on customers' satisfaction with that communication ($\beta = 0.796$), as well as on customers' intention to repeat the visit or recommend the establishment to others. ($\beta = 0.426$). However, HRM has a greater influence on response satisfaction than on promotional behaviour. This could be due to a lower incidence of revisiting intention, as the guests in the sample could be more interested in new destinations. Thus, it is evident that adequate planning and implementation of HRM is necessary to favour hotel performance and avoid adverse effects on it.

Lastly, regarding the moderating effects, the evidence shows that some factors moderate the effectiveness of a hotel's HRM strategy. Consequently, management can obtain a profile (segmentation) of customers based on how they interpret the hotel's responses to their online comments and how they react to them. Specifically, the results indicate that the more important the customers consider their review (comment relevance) and the more negative it is in terms of polarity (customers who have made comments of complaint or disagreement) the less influence HRM has on promotional behaviour, but the more influence it has on response satisfaction. These results, which extend the conclusions of Zhang et al. (2019), indicate the existence of a particularly sensitive segment due to the motivation of their comment or suggestion, showing themselves more immune to the persuasive capacity of the response received. It is therefore advisable to identify this segment and direct HRM towards specific, differentiated and focused actions on

satisfactorily overcoming the concerns or demands of these customers.

Similarly, this same segment shows higher satisfaction with responses, which indicates their capacity to appreciate or value a hotel's improvement in its HRM strategy. It is also worth noting that the less important the guests consider their review and the more positive it is in terms of polarity, the more influence HRM has on their promotional behaviour, but the less influence on their response satisfaction.

With respect to rating score, the customers most satisfied with a hotel's overall service (rating score ≥ 4) tend to be less satisfied with the response received. However, they show a greater propensity to promotional behaviour (revisit and recommend intention). These findings contribute to fill the gap highlighted by Bore et al. (2017).

Regarding the intrinsic characteristics of customers, their experience as reviewers on third-party platforms (reviewer's experience) is revealed as a factor to consider in the design and monitoring of HRM (Xie and So, 2018; Xu et al., 2020), because reviewers with less experience tend to be more satisfied with a given response, meanwhile those with more experience seems to be more demanding. On the other hand, contrary to what was obtained by Levy et al. (2013), the socio-demographic characteristics of customers (age and gender) do not exert a significant effect on the effectiveness of an establishment's HRM, therefore a properly designed HRM, according to the proposed model, would be suitable for all customer demographic profiles (age and gender).

Finally, the position held by the person who responds to online customer comments does not have a moderating effect either. Practical implications of this result are relevant because it could be deduced that if the HRM policy is properly designed and the implementation parameters clearly specified, its effectiveness may be independent of the functions of the position of the person responsible for its implementation.

4.3. Limitations and future research

It should be noted that the questionnaire for this study was conducted shortly before the pandemic and the implementation of mobility restrictions that drastically affected tourism activity from March 2020. The collection of information lasted from February to May 2020, thus the data refer to respondents' hotel stays prior to these dates. For this reason, the model could be a useful tool to test the potential impact that the pandemic situation has had on customers' perceptions of online communication. To do this, it would be necessary to replicate the study at the present time and compare the results.

Another limitation is the lack of information about the cultural environment of reviewers beyond their gender and age (such as their nationality or education level), their previous experience not just as reviewers but regarding hotel communication in general and their initial expectations before their hotel stay. Probably a deeper analysis of these items would provide interesting results.

Moreover, it would be valuable to analyse other areas of online communication with customers a priori, and evaluate which elements enhance promotional behaviour and satisfaction to design a communication strategy that focuses on those elements (e.g., eco-friendly policies or promotion policies) and emphasises them in advertisements by establishments on travel platforms.

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