

EXTENDED ABSTRACT

SUSTAINABILITY AND PERFORMANCE IN THE HOTEL INDUSTRY: THE MEDIATOR ROLE OF COMPETITIVE ADVANTAGES

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Over the last decades, there has been a wealth of studies focusing on the relationship between sustainability and performance with no conclusive results from different theoretical approaches (Theodoulidis *et al.*, 2017). The stakeholder theory and its extension, the social impact theory, hold that social responsibility practices have a positive influence on performance. In line with these theoretical approaches, and taking the resource-based view into account, firms tend to prioritise sustainability practices helping towards short-term reductions in costs and resources or generating resources and capabilities which make it possible to obtain a competitive advantage and increase performance levels (Garay and Font, 2013). However, Friedman's trade-off theory suggests that investing in sustainability has a negative impact on performance, since resources are allocated to other activities other than maximizing profits (Friedman, 1970). In addition, the slack resources theory considers that hotel managers may increase their interest in the development of sustainable practices when the hotel achieves high performance levels (Calveras, 2015) and to obtain positive synergies between the two variables.

The most recent research studies indicate that the lack of conclusive results regarding the direct relationship between sustainability and performance may be due to different reasons, which include not considering mediator variables between them (Ali *et al.*, 2019; Galbreath and Shum, 2012); or the way in which the variables are measured, as they should fit the specific characteristics of the industry analysed (Theodoulidis *et al.*, 2017). For this reason, this paper studies differentiation and cost competitive advantages as mediator variables between sustainability and performance.

Regarding the performance variables related to sustainability, most studies use perceptual performance measures (Garay and Font, 2013; Ghaderi *et al.*, 2019). The studies using objective data focus on corporate variables, such as ROA, ROE, sales growth, and Tobin q (Kang *et al.*, 2010; Zhu *et al.*, 2014). In this study, performance is measured from both a subjective and an objective point of view in order to check if the results coincide. Besides, few studies have considered the distinctive features of the hotel industry, to measure performance in an objective way. Our paper uses revenues per available room (RevPAR) as an operating performance variable at the hotel level commonly used in the hotel industry and a perceptual performance construct. In addition, control variables are included in this research work which are common in the hotel industry, such as size by number of rooms, chain affiliation and number of stars, and their relationship is analysed with the variables studied.

Although the relationship between sustainability and performance has been widely studied in the literature in manufacturing industries (Orlitzky *et al.*, 2003), few scholars have studied this relationship in the tourism industry, more specifically, in the hotel industry (Garay and Font, 2012; Ghaderi *et al.*, 2019). Besides, most of the studies dealing with this relationship focus on only one of the three pillars of sustainability: the environmental component (Tang *et al.*, 2014; Ramanathan *et al.*, 2016). Few works study all three pillars of sustainability: economic, environmental, and social sustainability (Garay and Font, 2012; Ghaderi *et al.*, 2019), as has been done in this study.

From these theoretical arguments, the purposes of this research work are the following: (1) to analyse the direct link between sustainability and performance in the hotel industry; (2) to analyse the indirect link between sustainability and performance, considering differentiation and cost competitive advantages as mediator variables between sustainability and hotel performance.

In order to achieve the purposes of this research, a structured questionnaire was sent both by ordinary mail and by e-mail in two waves, between October 2018 and February 2019, to all 3- to 5- star hotels located in Spain in 2018. The hotel census was obtained from the Alimarket (2018) database. The total population was formed by 5,071 hotels (2,233 3-star, 2,472 4-star and 366 5-star). Before sending the questionnaire to the whole population, a pre-test of the questionnaire was carried out with 14 different respondents: six members of hotel management (two CEOs of two hotel chains, two managers of general services of hotel chains, and two hotel managers), two representatives of hotel associations, two representatives of national tourist knowledge transfer institutions, one representative of Spanish tourism policy, two tourism scholars and a tourism consultancy firm.

Completed questionnaires were received from 365 hotels, which means a response rate of 7.20% and a sampling error of 4.94% (95% confidence level, $p = q = 0.5$). The

sample distribution by hotel category was: 38.1% 3-star; 52.3% 4-star; and 8.2% 5-star. 1.4% decided not to say the category. Distribution by affiliation showed that 48.6% of the hotels belonged to a hotel chain and the rest (51.4%) were independent hotels. The average size was 124rooms.

The aims of this study were tested applying structural equations models based on Partial Least Squares (PLS) approach using SmartPLS 3 software (Ringle *et al.*, 2014). Sustainability is measured as a composite second-order construct, that is, it is the result of aggregating three reflective first-order constructs (economic, environmental, and social sustainability practices). Competitive advantages in costs and differentiation, and perceptual performance are measured as reflective first-order constructs as well.

The results show that the direct relationships between sustainability, perceptual performance and RevPAR are significant. It is especially interesting to mention that sustainability is directly related to differentiation and cost competitive advantages. Regarding the relationship between competitive advantages and performance constructs, only differentiation competitive advantage shows a direct, significant relationship with perceptual performance.

Concerning control variables, the results show that there are significant relationships between sustainability and chain affiliation and hotel size. The same results are achieved in the case of cost advantage. However, differentiation advantage is significantly related to hotel stars or category, and perceptual performance to hotel size.

Regarding the mediation effect of differentiation and cost competitive advantages in the relationship between sustainability and hotel performance, it is checked that the direct effect is significant in all cases. However, out of the individual indirect effects, the only significant one is that considering the mediation effect of differentiation advantage between sustainability and perceptual performance. Therefore, the mediation effect of differentiation advantages is partial between sustainability and performance.

Therefore, the results show that the direct relationships between sustainability, perceptual performance and RevPAR are significant. The results regarding the positive significant relationship between sustainability and performance coincide with those achieved by other studies in the hotel industry (Farha *et al.*, 2018; Ghaderi *et al.*, 2019; Inoue and Lee, 2011). Relating it to the stakeholder theory, the results show that sustainability practices may have a direct or indirect impact on stakeholders, such as employees, customers, suppliers, and the government, which helps towards the economic development of the destination (Ghaderi *et al.*, 2019).

In addition, the results show that cost reduction and differentiation are two major reasons why managers could be interested in developing sustainability practices. These results are consistent with the resource-based view and the institutional theory, as hotels use their resources and capabilities in order to obtain competitive advantages, and as a way to gain legitimacy among their stakeholders. More specifically, the differentiation advantage acts as a mediator variable in the relationship between sustainability and perceptual performance, although this is not fulfilled when analysing RevPAR. When considering perceptual performance, the importance of differentiation competitive advantage is stressed as a variable which helps to better understand the way sustainability influences on performance. This study has obtained similar results to those obtained by González-Rodríguez *et al.* (2019) and Zhu *et al.* (2014) when considering reputation as a mediator variable.

Furthermore, this research has found a significant relationship between sustainability and cost competitive advantage, although the latter does not have a positive impact on performance. This could be due to the fact that managers may have a very positive view of the cost savings resulting from not generating negative externalities for society and the environment. For instance, polluting the environment does avoid potential costs deriving from governmental fines and penalties, but such cost saving has no positive or negative reflection on the hotel's performance, because it does not actually happen. There are other potential cost savings, for instance, reduced consumption of water and energy, but such savings are not enough to result in a significantly improved performance.

This research work has several implications:

(1) Mediator variables have been included in the relationship between sustainability and performance; more specifically, competitive advantage in costs and differentiation.

(2) Investing in sustainability significantly influences the levels of perceptual performance and RevPAR that hotels achieve. Therefore, it is important to develop sustainable practices in hotel establishments to generate a positive profit stream.

(3) The differentiation obtained through sustainability practices explains, in turn, the positive performance levels achieved by hotels. Therefore, there are positive synergies between sustainability, differentiation and performance that must be considered and managed by hotel companies.

(4) Most of the studies on sustainability topics have focused on analysing how one of the pillars of sustainability, the environmental factor, influenced on competitive advantage in costs and differentiation. This paper has considered all three pillars of sustainability: economic, environmental, and social sustainability. This makes it possible to offer managers a wide array of sustainability practices, not only in the environmental sphere, but also in the social and economic ones, which may also have a positive influence on the hotel's competitiveness (Garay and Font, 2012). Thus, for instance, in the economic sphere, some practices may be emphasized, such as the employees' wages being above the average in the industry, offering bonuses to employees and the existence of staff training programmes. In the social sphere, participation in charity projects, supporting local community development, promoting gender equality, facilitating work-family conciliation among the staff, and involving suppliers and customers in social responsibility actions, amongst others. If managers suitably implement these sustainability practices in their hotels, they may improve their competitiveness and their performance.