RESEARCH ARTICLE

What drives the adoption and consumption of green hotel products and services? A systematic literature review of past achievement and future promises

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Abstract

The current study utilises the time-tested systematic literature review (SLR) method to identify and analyse 76 studies addressing the consumer adoption of green hotels. The results of the research profile analysis show that the literature on consumers' adoption and consumption of green hotel products and services is expanding and gaining more recognition from researchers working in Asian contexts, particularly China, Taiwan and India. Moreover, the qualitative thematic analysis yields four key themes, (a) consumer behaviour variables addressed, (b) antecedents and mediators of green hotel adoption, (c) moderators of the relationship and (d) methodological considerations, for which limitations and future research directions are identified accordingly. The main novelty of the study lies in the development of a unified framework of consumer adoption and consumption of green hotel products and services that calls for a multitheoretic examination of the issue. This review is among the first to consolidate the growing literature on consumer adoption and consumption of green hotel products and services.

KEYWORDS
environmentally conscious, green consumer behaviour adoption, green hotels, sustainability, systematic literature review

1 | INTRODUCTION

Researchers and practitioners worldwide have recently witnessed the exponential rise of green and responsible consumer behaviour (Amberg & Fogarassy, 2019; Awan et al., 2020; Mainieri et al., 1997; Peattie, 2010; Yadav & Pathak, 2017). In the hotel literature alone, green consumer behaviour has received considerable attention in the last five years (Assaker et al., 2020; Eid et al., 2020; Hou & Wu, 2020; Nimri et al., 2020; L. Wang, 2020). Moreover, a 2019 survey by Booking.com showed that 73% of travellers expressed their intention to stay at eco-friendly accommodations during their travel, which was 5% higher than the previous year

(Booking.com, 2019). As consumers become more aware of their impact on the environment, they also expect the businesses they interact with to do their part for the environment. The hospitality sector, particularly hotels, consumes enormous amounts of resources to operate, such as water and energy, and is also responsible for large quantities of waste. For instance, a study by Reconomy estimated that British hotels generate 289,700 tonnes of waste per year (Open Access Government, 2018). This has led to the creation of green hotels that echo consumers' concerns about sustainability (Han & Yoon, 2015) and seek to operate in a more environmentally friendly way that incorporates initiatives and processes to protect the environment (Green Hotel Association, 2014).

Green hotels and green initiatives in hotels are quickly becoming the norm. A survey of 4544 hotels in the Green Lodging Report which was conducted across 61 countries showed that 99.4% of the hotels had energy tracking facilities, 21.4% produced renewable energy on-site, 75.6% had some form of recycling and 98.1% had water tracking installed in addition to initiatives to reduce waste generation like not delivering newspapers and encouraging towel reuse (Greenview, 2018). While implementing green initiatives can save costs, it can also become a serious capital expense on the other end in terms of new technology and labour. Thus, green hotels often end up charging price premiums from their consumers (Casado-Díaz et al., 2020). However, they also provide the value of a reduced environmental impact to the environmentally-conscious consumer (S. Wang, Wang, Wang, et al., 2018).

Consequently, a large body of literature on consumer behaviour in green hotels has evolved to understand the consumers' adoption intentions (Nimri et al., 2020; Yarimoglu & Gunay, 2020), particularly their willingness to pay a premium (Casado-Díaz et al., 2020; G. Choi et al., 2009) and their word-of-mouth intentions (Tanford et al., 2020). This research stream has continued to grow considerably. For example, a 2012 review of the green hospitality literature observed that only 12 studies addressed consumer behaviour (Myung et al., 2012). Four years later, the review by Gao et al. (2016) showed that only the quantitative studies on green hospitality had increased to 24 by the end of 2015. Thus, existing reviews have not adequately captured this interesting yet expanding body of literature. In the absence of such consolidation and analysis, academicians and practitioners in the area are uncertain as to what exactly motivates consumers to show patronage to green hotels. This is a particularly pressing gap as academicians need information regarding the literature to better conceptualise and perform studies in the area, whereas green hotel practitioners need to know what they can do to motivate consumers to visit their premises and pay a premium for the services and products offered. Furthermore, green hotels are often studied as a 'black box' without much attention paid to the extent to which the greening is done.

Thus, we believe that the time is now right to re-evaluate and consolidate this emerging body of literature to synthesise future research directions from the findings of the extant studies on green hotels. By doing so, we seek to make two key contributions. First, we hope academicians working in this area can use our study to advance their research on better understanding the consumer behaviour regarding green hotels. We also hope to give a better understanding of what exactly constitutes a green hotel in the consumers' view. Second, by building a unifying model of consumer behaviour concerning green hotels, we seek to help practitioners identify the key factors that influence favourable consumer behaviour in terms of green hotel adoption, particularly consumers' visit intention and willingness to pay a premium.

We used the systematic literature review (SLR) method (Tranfield et al., 2003) to find and analyse the extant literature. Our searching of key databases and filtering of the studies by relevance yielded 76 research articles that have addressed green hotels' adoption. In addition to the research profile, the qualitative content analysis delivered four key research themes: (a) the use of different consumer behaviour variables, (b) antecedents and mediators of green hotel adoption, (c) moderators and (d) methodological limitations. We identified research limitations and proposed possible questions for future research for each of the four themes. Moreover, we present a unified framework to help scholars and practitioners better understand consumer behaviour concerning green hotels.

The rest of the research article is organised as follows. The second section presents an overview of the SLR methodology used in the study, whereas Section 3 presents the research profile of the studies covered. We then move on to the thematic foci uncovered from the qualitative content analysis, where we present the thematic analysis and limitations in each theme. We then present a unifying framework on consumer behaviour regarding green hotels. Finally, we conclude with the implications, limitations and conclusion section.

2 | SCOPE OF THE REVIEW

The Green Hotel Association defines green hotels as 'environmentally-friendly properties that implement initiatives to save water and energy and reduce solid waste while simultaneously saving money to protect the earth' (Green Hotel Association, 2014, p. 1). This is currently one of the most accepted definitions of green hotels (Eid et al., 2020; Hou & Wu, 2020; M. Lee et al., 2011; Tan et al., 2020). We believe that the tenet of saving money is essential to this definition as it can change the green hotel's image from being premium to cheaper in the eyes of the consumer as they may expect hotels to pass on the cost saving to the consumer. However, in most cases, hotels have to invest significantly to realise these cost gains and are forced to charge premiums from their consumers (Kuminoff et al., 2010), thus highlighting the importance of studying individual green initiatives and their impact on consumer adoption behaviour. In particular, some initiatives may be easier and more cost-effective to implement than others.

On the consumer behaviour side, we seek to investigate the different behavioural intentions that consumers may exhibit towards green hotels, particularly in terms of willingness to pay more, visit/ booking intention, word of mouth (WOM) and satisfaction. Another behavioural variable related to adoption that has recently been gaining traction is the intention to participate in green hotel initiatives (H. Chen et al., 2019). Accordingly, we have included it as an adoption variable of interest as well. The scope and important definitions used in the study have been summarised in Table 1.

3 | METHOD

We utilise the time-tested SLR method to identify and analyse the empirical studies to ensure a high level of reproducibility and reliability (Tranfield et al., 2003). The SLR method offers several advantages compared with other review methods. First, SLR methods allow for

TABLE 1 Definitions of outcomes

Concept	Subcomponents	Definition	Example references
Green hotel		Environmentally friendly properties that implement initiatives to save water and energy and reduce solid waste while simultaneously saving money to protect the earth	Green Hotel Association (2014, p. 1)
Adoption behaviours	Visit intention, intention to stay, revisit intention and booking intention	The intention of a consumer to visit, revisit, book or stay at a green hotel	Gao and Mattila (2016); Trang et al. (2019); K. H. Lee et al. (2019)
	Willingness to pay more, willingness to pay a premium and intention to pay	Consumers' intention to pay a premium for hotels with green initiatives compared with hotels without those green initiatives	Martínez García de Leaniz et al. (2018); K. H. Lee et al. (2019)
	Word-of-mouth (WOM) intention, e-WOM intention and green WOM	A green hotel consumer intends to recommend the green hotel to someone else in-person or on the internet	Tanford et al. (2020); Martínez García de Leaniz et al. (2018); Mele et al. (2019)
	Intention to participate	The consumer intends to take part in green hotel initiatives during their stay and practice eco-friendly action	Trang et al. (2019); Han, Lee, Trang, et al. (2018)
	Loyalty	Loyalty is a long-term emotional commitment by a customer with the green hotel	Han et al. (2019); Assaker et al. (2020)

the easy, observable and reliable search and identification of relevant literature while reducing bias (Littell, 2006; Reim et al., 2015). Second, it also enables the easy identification of gaps to advance future research directions (Sharma et al., 2020). Consistent with the review process put forth by Tranfield et al. (2003), we follow a three-step process: (a) we first plan the review and decide the appropriate research questions (RQs), (b) we define our inclusion–exclusion criteria applicable to the studies and (c) we apply the review criteria to the search results.

3.1 | Research questions

This review is guided by five key RQs, as follows: (RQ1) How has the literature addressing consumer adoption of green hotels evolved since its emergence? (RQ2) What are the different types of consumer behaviour-related variables that have been considered concerning the adoption of green hotels? (RQ3) What are the different antecedents of the consumer adoption of green hotels? (RQ4) What are the different methodological trends in the prior literature on the adoption of green hotels? (RQ5) What are the different gaps and limitations in the existing research addressing the consumer adoption of green hotels?

3.2 | Inclusion and exclusion criteria

We referred to the rich literature on systematic reviews and its enumerated inclusion–exclusion criteria.

The current review had five such inclusion rules. A study was considered for inclusion in the review if (a) it investigated some aspect of

the consumers' use of green hotels' products, services or practices, including the intention to adopt, willingness to pay a premium, loyalty intention and WOM intention, among others. Furthermore, studies addressing both intention and actual behaviour were included; (b) studies across all years were also considered, with no filter placed according to the year of publication; (c) only studies in the English language were included to avoid language bias (Khanra et al., 2020); (d) studies needed to be empirical in nature and (e) all studies needed to be peer reviewed.

The review had the following exclusion criteria: (a) non-peer-reviewed literature and grey literature; (b) relevance, for example, studies from the architecture domain that did not talk about consumer perception; (c) duplicates between databases and (d) theoretical and editorial works were excluded, in compliance with common practice and the purpose of the review (Boiral et al., 2018).

3.3 | Review protocol and outcomes

With the guiding RQs in mind, we move on to the identification of keywords. Because the prior reviews identified that the area was fairly small (Gao et al., 2016), we decided to have a broad search term—'green hotel*'. This would ensure a large enough scope to include all of the studies that have discussed some type of green initiatives in the hotel. We first searched the keyword 'green hotel' in Scopus and Web of Science (WOS) as these two databases are frequently used in hospitality and tourism-related reviews (Pahlevan-Sharif et al., 2019). This search yielded 758 results from WOS and 730 results from Scopus. After eliminating duplicates, we were left with 1137 studies. Because this

number of studies was manageable for filtering, we did not do research with updated keywords. Consistent with other reviews, we did not retrieve studies from grey literature that was not peer reviewed (Kushwah et al., 2019).

We then went on to perform filtering by gauging the studies' relevance by title and abstract. In this step, we retained all the studies that examined some aspect of the green hotel or its green initiatives, leaving us with 325 studies. The eliminated studies in this step were mainly from technology and architecture journals that discussed technical green initiatives and had no management angle to them. Out of the 325 studies, we proceeded to the second round of title and abstract filtering, where we filtered out all of the studies that did not focus on consumer behaviour in green hotels. The eliminated studies in this stage had topics including green HRM and management adoption of green practices; they did not discuss how they influenced consumer behaviour. We were then left with 101 studies at this stage.

We then proceeded to read the full text of each study. During this phase, the selected research articles were read for relevance. Each of the co-authors independently read the articles and noted the following: (a) the primary factor influencing behaviour or behavioural intention, (b) the nature of intention or behaviour, (c) key theories, (d) mediators, (e) moderators, (f) methodological design, (g) country context, (h) hotel context, (i) results and (j) limitations of the study.

This was done in addition to collecting the profiling information, including (a) the year of publication and (b) the source of publication. We found that 25 studies did not meet our selection criteria, which we then proceeded to eliminate. Finally, we were left with 76 studies, the data from which was further used to build the research profile and thematic analysis.

3.4 | Research profile

We captured various profiling information from the studies to investigate the trends associated with their publication outlets, the country contexts studied, methodological designs and theoretical views.

3.4.1 | Publication trends

The works addressing consumer behaviour have dramatically increased between the last decade and now (December 2020) with a total of 76 studies, compared with only 12 studies, as reported by Myung et al. (2012). The trend of the publications can be seen in Figure 1.
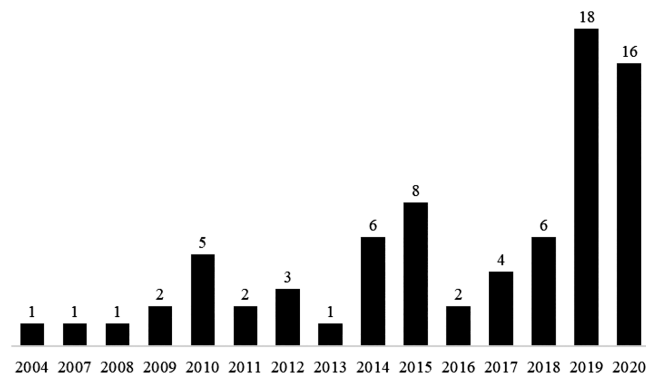
3.4.2 | Publication outlet

Regarding the publication sources, we observed that the *International Journal of Hospitality Management* had the highest number of articles, followed closely by the *International Journal of Contemporary Hospitality Management* with nine research articles. The top six journals contributed 39 of the 76 articles, indicating a concentration of output to these journals. The list of top 10 journals has been listed in Figure 2.

3.4.3 | Country context investigated

Regarding the country context, the investigated studies in the sample covered 20 countries. The distribution of studies by the country

FIGURE 1 Publication trend across years

FIGURE 2 List of publication outlets with at least two publications

studied has been given in Figure 3. Only countries with at least two studies have been shown in this figure. It is interesting to note that about half of the studies investigated either the United States (21 studies), China (10) or Taiwan (7), with 38 of the 76 studies investigating consumer behaviour in these three countries. Furthermore, 24 of the 31 studies discussing the Asian context were published between 2015 and 2020, indicating a shift in study focus to this area. Finally, only one study was comparative in nature.

3.4.4 | Methodological design

Next, we wanted to investigate the methodological design followed by the research articles. It is interesting to note that 73 of the 76 articles followed a primarily quantitative methodology, with some of the studies adopting a qualitative prestudy to update their scales. Of the remaining four studies, one study had a mixed design, and the other three were qualitative in nature. There were major commonalities in the research design and data collection techniques used. Therefore, they have been discussed separately in the thematic foci section.

3.4.5 | Theoretical foundations

Although several other theories have been used to understand the consumer adoption behaviour of green hotels, the most used theories were the theory of planned behaviour (TPB) (Ajzen, 1991), value–belief–norms (VBN) (Stern et al., 1999) and social identity theory (Tajfel & Turner, 2004).

The most used perspective was the TPB (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), with 24 of the 76 studies utilising this theoretical perspective or an extension of it to advance their arguments. TPB predicts that a consumer is rational and often driven by some type of motivation. Their behaviour in the presence of alternatives, in turn, is guided by their intention to exhibit their behaviour, which is further guided by three parameters: their attitude, perceived behavioural control (PBC) and subjective norms (SN). Notably, TPB was developed as an extension of the theory of reasoned action (TRA), which included only attitudes and SN (Fishbein, 1980).

Here, attitude towards a behaviour refers to the consumer's evaluation (positive or negative) of the outcome gained by engaging in the behaviour. Attitude is said to be influenced by the consumer's behavioural beliefs and their evaluation of the outcomes resulting from the behaviour. Here, behavioural beliefs imply that consumers perceive the probability of the desired outcome from engaging in a behaviour (Ajzen & Fishbein, 1980). SN, meanwhile, refer to the social pressure a consumer feels to engage in the behaviour (Ajzen & Driver, 1992), which is driven by their normative beliefs and their intention to comply. Normative beliefs are a consumer's perception regarding the importance of the behaviour, as assigned by their reference group (like their family or friends) (Ajzen & Fishbein, 1980). Finally, PBC refers to the consumer's belief in their ability to engage in the behaviour relative to their present resources and constraints and is driven by their control beliefs and perceived power. Control beliefs are the consumer's perception of certain resources or constraints to engage in the behaviour (Ajzen & Madden, 1986).

Studies utilising TPB as their theoretical perspective have made use of all three factors or a subset of the factors to argue that consumers' attitude towards green hotels primarily guides their behavioural intention to visit them (e.g., Eid et al., 2020; Nimri et al., 2020; Jiang & Gao, 2019; L. Wang, Wong, & Elangkovan, 2020), their belief in how important staying in green hotels is to their relevant reference group (Eid et al., 2020; Mohd Suki & Mohd Suki, 2015; Yarimoglu & Gunay, 2020) and their perceived control of engaging in the behaviour (Eid et al., 2020; Grubor et al., 2019; Teng et al., 2015). Our review of the prior literature has observed that scholars have proposed extensions to the TPB specific to green hotel behaviour and green hotel-related external factors. In particular, the consumer-specific factors included the past experience of staying in a green hotel (Nimri et al., 2020), consumer satisfaction (Han & Kim, 2010), perceived moral obligation (M. F. Chen & Tung, 2014) and environmentally conscious behaviour (Y. Kim & Han, 2010), among others. Some studies have extended the theory by adding green hotel-specific external factors that act as an antecedent of attitudes, SN and PBC, including
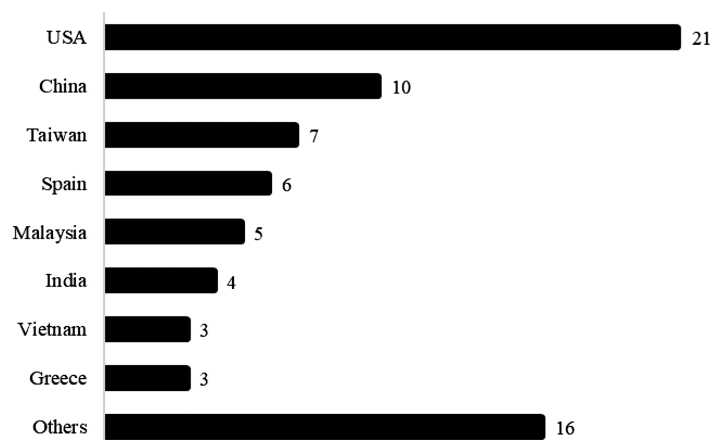

FIGURE 3 List of countries that have been investigated

One study did not mention the country context.

service quality (Han & Kim, 2010), environmental concerns (M. F. Chen & Tung, 2014) and environmental education (Chang et al., 2014).

Studies using social identity theory, meanwhile, have argued that consumers identify themselves more with organisations with an environmentally sustainable disposition (Kang et al., 2012; Njite & Schaffer, 2017). Another theoretical perspective prominent in the literature is VBN, which argues that values guide beliefs, which subsequently guide personal norms, and finally, guide behavioural intention (Stern et al., 1999), thereby making this theory a natural extension to the TPB.

The use of multiple theoretical perspectives in the literature shows that a consumer's intention to adopt green hotel products and services is inherently a complex question that cuts across a variety of theoretical perspectives and boundaries. The area can currently gain from the unification of these different perspectives into a unified framework that is specific to the green hotel context.

4 | THEMATIC FOCI

The selected 76 studies investigated a variety of antecedents and outcomes of consumers' green hotel adoption. To make better sense of the research landscape and synthesise the results, we conducted an extensive qualitative thematic analysis (Seth et al., 2020). We assessed each of the selected studies and collected answers to our primary RQs presented in the introduction. Each of the 76 studies was independently read by the co-authors and open and axially coded to identify various consumer behaviour variables, antecedents, mediators and moderators. To ensure interrater reliability, the co-authors pooled together their results and discussed the results. The authors arrived at similar themes but contributed different viewpoints to the discussion on limitations and future research. The results were consolidated and presented to a panel of experts working in the green hospitality area to validate our themes. These validated results have been presented in this section under four different thematic foci:

(a) consumer adoption behaviour variables addressed, (b) antecedents and mediators of consumer adoption behaviour, (c) moderators and (d) methodological considerations and limitations. The thematic foci and subthemes have been summarised in Figure 4.

4.1 | Green hotel adoption behaviour: Outcomes addressed in the extant literature

Several green hotel-related consumer behaviour variables have been addressed in the extant literature. Although the list has a variety of variables, they can be classified into five different types of behaviours: (a) intention to visit/revisit or book/rebook green hotels, (b) willingness to pay for green hotel services and products, (c) engaging in WOM or electronic WOM (e-WOM), (d) intention to participate in green hotel initiatives and (e) satisfaction and loyalty.

4.1.1 | Gaps and future research suggestions

The present review has observed that the prior literature suffers from three research gaps in terms of outcome variables. These are the following:

(a) *Overemphasis on some outcome variables:* such as willingness to pay a premium, revisit intentions and so on. Due to this, most of the existing studies have revolved around these variables, offering a limited understanding of other possible philosophies governing behavioural outcomes. For example, only a few studies have attempted to examine other equally interesting and influential behavioural outcomes, such as the one by Kim and Han (2010), which examined consumers' intention to pay conventional prices rather than their intention to pay a premium, as studied by the majority of studies (e.g., K. H. Lee et al., 2019; González-Rodríguez et al., 2020, Tang & Lam, 2017). Notably, Kim and Han (2010) showed that even consumers with positive attitudes, social norms, PBC and environmentally conscious behaviour chose to pay normal prices even though ample
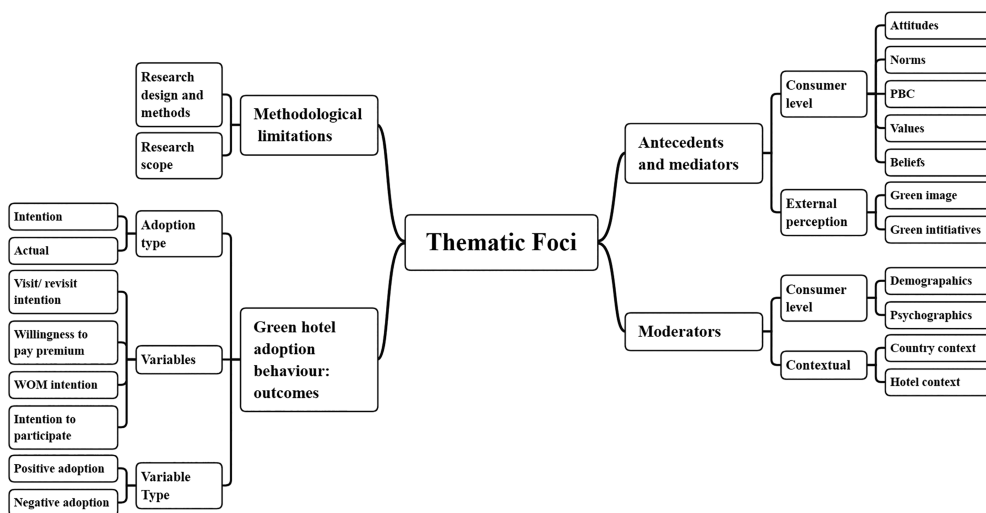

FIGURE 4 Thematic foci

evidence has suggested that people with these characteristics paid a premium for green hotels (Tang & Lam, 2017; Yadav et al., 2019). This study highlights a conflict in the consumer's minds regarding the value gained by staying in a green hotel versus the discount expected for the perceived 'inconvenience' of their participation in green initiatives. The recent study by Peng and Chen (2019) echoed similar sentiments and suggested the influential role of hesitation and risk in deciding consumers' intention not to purchase green luxury hotel services. Consequently, there is a need to undertake studies that focus on negative variables, such as intention not to visit or revisit, dissatisfaction, disloyalty, and negative WOM, because these can expose possible pitfalls with running green hotels.

(b) *Limited focus on theoretical perspectives due to the emphasis on variables*: due to the excess focus on positive behavioural intention, the literature has evolved as a subset of general consumer behaviour variables and repeatedly relied upon the same theoretical perspectives, such as TPB and VBN. We believe that an investigation of new consumer outcome questions, particularly questions regarding negative or status quo bias, is better guided by the use of theoretical lenses, such as innovation resistance theory (IRT) (Ram & Sheth, 1989) or behavioural reasoning theory (BRT) (Westaby, 2005) as these are better conceptualised to capture the negative and positive reasoning that a consumer does before engaging in a behaviour.

(c) *Focus on intentions instead of actual behaviour*: the majority of the prior studies have focussed on the consumers' adoption intentions rather than on their actual adoption behaviour (Line & Hanks, 2016; Nimri et al., 2020; Tan et al., 2020; Yarimoglu & Gunay, 2020). Indeed, only a small set of studies have investigated actual behaviour (Agag & Colmekcioglu, 2020; Eid et al., 2020; Han et al., 2019). However, these studies only addressed consumers' booking and visit behaviour. Thus, more studies are needed to understand how intention leads to actual behaviour for other outcomes, especially as the prior literature has highlighted the existence of an intention-behaviour gap in this area (Sheeran, 2002). In other words, a consumer's intention to adopt may not lead to their actual adoption and patronage of a green hotel.

RQ1.1. How will results regarding adoption differ if negative outcome variables like green hotel avoidance are studied?

RQ1.2. Are the results for behavioural intention outcomes different than actual behavioural outcomes? If yes, by what magnitude?

RQ1.3. If not, what factors mediate or moderate the difference?

4.2 | Green hotel adoption behaviour: Antecedents and mediators

Several antecedents to green purchase behaviour have been studied in the extant literature. These can be classified into two primary classes: (a) factors related to consumers and (b) factors related to the consumer's environment.

4.2.1 | Factors related to consumers

A consumer has several internal mental models that they use to make decisions. These models have been explored by theories like TPB and VBN (Ajzen & Fishbein, 1980; Stern et al., 1999). The covered literature recognises some components of this internal mechanism as being driven by various theoretical arguments. Prior studies have tried to analytically determine consumers' various mental heuristics and their antecedents regarding the decision to adopt green hotels. These factors may be classified into (a) attitudes, (b) beliefs, (c) PBCs, (d) subjective and personal norms and (e) others, based on the two major theoretical arguments used (TPB and VBN). The first four factors discussed above are components of TPB and are often studied together.

Attitudes, beliefs, PBC and subjective and personal norms
The relationship between attitude, beliefs, PBC and SN is well documented in TPB. Beliefs drive attitudes, norms and PBC, which, in turn, drive intention. The extant literature, which mainly draws from TPB, has validated the TPB model in this area (Grubor et al., 2019; Agag & Colmekcioglu, 2020; Chen & Peng, 2012; Y. Kim & Han, 2010). Furthermore, several studies have also shown how SN influence consumers' attitudes to adopt (A. Chen & Peng, 2012; Han et al., 2010). The attitudes, SN and PBC related to green hotels are thus influenced by behavioural, normative and control beliefs (Han et al., 2010; Han & Kim, 2010). Some studies have combined these beliefs into a single parameter, which is often conceptualised as the environmental concern that drives attitudes, beliefs and norms (M. F. Chen & Tung, 2014). Furthermore, awareness of environmental consequences can drive PBC (Eid et al., 2020). However, attitude towards green hotels has been explored the most in the literature with various internal and external antecedents. For instance, Line and Hanks (2016) investigated the role of luxury belief and environmental beliefs in driving green hotel attitude.

Attitude can be defined as a 'learned predisposition to respond in a consistently favourable or unfavourable manner concerning a given object' (Fishbein & Ajzen, 1975, p. 15). In this case, we mean the extent to which a consumer has a favourable or unfavourable feeling towards issues related to green hotels. Green hotels are differentiated from conventional hotels due to their environmentally friendly initiatives, and thus, consumers may view them differently than their non-green counterparts (Nimri et al., 2020). Consumers, therefore, develop evaluations on the hotel's 'environmental friendliness' based on the hotel's visible attributes. Most studies group such initiatives together and term them as 'attitude towards green hotels' (Agag & Colmekcioglu, 2020; Teng et al., 2015; Yadav et al., 2019), 'green purchase attitudes towards hotels' (L. Wang et al., 2019) or 'attitude towards green practices' (Manaktola & Jauhari, 2007).

Several consumer-level and external antecedents have also been explored regarding attitude, indicating that attitude towards green hotels is a significant mediator in adoption decisions. However, some of these mediators may also influence PBC or SN. These antecedents include values like biospheric, egoistic and altruism (can also influence

PBC and SN) (Eid et al., 2020; Teng et al., 2015; Verma et al., 2019; L. Wang, 2020), perceived benefits and risks (Agag & Colmekcioglu, 2020), consumer effectiveness (L. Wang, 2020), anticipated positive or negative emotions (Ahn & Kwon, 2020), attitude towards green practices and environmental concern (Jiang & Gao, 2019; Verma et al., 2019; L. Wang, 2020), knowledge of the environment (L. Wang, 2020) and perception of external factors like hotel image (Tanford et al., 2020). Attitude towards green hotel adoption intention can also be influenced by personality traits (Tang & Lam, 2017) and demographic characteristics like age, gender, and income (L. Wang, Wong, & Narayanan, 2020). These results have highlighted that attitude can be influenced by a myriad of consumer-level and external factors, making it the most interesting factor of the study in extant literature. Practitioners thus have a choice of which factors they should influence when trying to elicit a particular attitude and, consequently, behavioural intention among consumers.

Other consumer-level antecedents to behavioural intention

Another stream of literature that is currently driving the research is the VBN theory (Stern et al., 1999). Here, the value may be defined as a goal that drives a person regardless of the situation (Schwartz, 1992, p. 21) as such a value is a higher order factor to beliefs and, in fact, drives them. Works adopting this theory or part of it argue that consumers' internal values drive their preference for green hotels. Because of the close proximity between beliefs and attitudes, VBN theory and TPB have been used to extend each other when evaluating a consumer's complete internal mental model in green hotel adoption (H. Choi et al., 2015; Eid et al., 2020). The link between values and green hotel behavioural intentions can also be argued from a BRT perspective, which argues that intentions are driven by reasons, which, in turn, are driven by values (Tan et al., 2020; Westaby, 2005). In particular, these studies argue that consumers' altruistic, biospheric and egoistic values drive their adoption intention or attitude to adopt (Eid et al., 2020; Teng et al., 2015; Verma et al., 2019; L. Wang, 2020).

4.2.2 | External factors that drive consumer perceptions

External factors, or more specifically, the consumers' perception of external factors (e.g., the perceived value from using green hotel products and services or green marketing messages), are information to decide if staying in a green hotel is a good decision (Preziosi et al., 2019). Thus, these factors act as antecedents to consumer beliefs, attitudes and values, with consumers evaluating green hotels based on two key factors: (a) the green image of the hotel and (b) the green initiatives that consumers experience.

Green image

Several studies have discussed the importance of awareness in deciding consumer behavioural intention. Therefore, a significant research effort has been observed on consumers' green image formation and its subsequent impact on behavioural intentions (Assaker et al., 2020;

Han et al., 2009; J. S. Lee et al., 2010; Martínez García de Leaniz et al., 2018; Martínez et al., 2019). Here, the image may be defined as a reflection of the beliefs, impressions and ideas that a focal person or group of persons have regarding the products, service, places, firm, brand or destination (Kotler et al., 1993; J. S. Lee et al., 2010).

Using image theory, this line of reasoning argues that a consumer's behavioural intention is largely dependent on the 'green image' portrayed by the hotel and the actual initiatives it has put in place. Therefore, hotels have recently started to recognise the importance of communicating these green initiatives in building a desirable green image, which influences desirable behavioural intentions and, consequently, consumer behaviour (Assaker et al., 2020; Martínez García de Leaniz et al., 2018). Moreover, this green image has been linked to the intention to stay at a green hotel (Han et al., 2009; Martínez et al., 2019; Martínez García de Leaniz et al., 2018), intention to engage in WOM (Han et al., 2009), willingness to pay more (González-Rodríguez et al., 2020; Martínez García de Leaniz et al., 2018; Yarimoglu & Gunay, 2020), satisfaction (Yarimoglu & Gunay, 2020) and loyalty (Assaker et al., 2020; Yarimoglu & Gunay, 2020). Furthermore, having a green image has also been linked to increased trust in the hotel (Martínez, 2015). However, in a contradictory finding, the intention to engage in WOM was not influenced by Spain's green image (Martínez García de Leaniz et al., 2018), although none of the studies indicated a negative influence of green image.

Considering the importance of a green image, several studies have also examined this image's antecedents, including value (Lee et al., 2010), service quality (J. S. Lee et al., 2010), advertising and communication framing (Eid et al., 2020; Preziosi et al., 2019; Sahin et al., 2020; Tanford et al., 2020), reliability and credibility of communication (S. B. Kim & Kim, 2014) and green practices in the hotel (Martínez García de Leaniz et al., 2018). These extensive investigations show that the influence of green image and advertising may be moderated by contextual factors like the country or type of hotel (Sahin et al., 2020). Because hotel type is not mentioned in this study, future studies on this variable are needed. A later section will extend this discussion by examining the importance of moderating factors in this area.

Green initiatives

The second subset of studies mainly discussed the influence of a hotel's green initiatives on consumer perceptions. Well-communicated green initiatives can also lead to green corporate image (Tanford et al., 2020). The extant literature has further explored three main kinds of green initiatives, focusing on (a) reducing energy consumption (Han et al., 2019; Trang et al., 2019), (b) reducing water consumption (Trang et al., 2019) and (c) managing solid waste and biodiversity programmes (Han et al., 2019; Kim et al., 2012; Trang et al., 2019).

Consumers perceive various green initiatives in hotels and make decisions to stay at these institutions accordingly (Trang et al., 2019). Furthermore, some studies have shown that the type of green initiative and consumers' willingness to participate in them also play a role in deciding consumer patronage (H. Chen et al., 2019). In a related study looking at the influence of green initiatives, Kim et al. (2012) noted that

consumer's perception of each initiative positively influenced their intention to stay; however, water programmes where consumers had an option to participate (e.g., reusing towels) (Han, Lee, & Kim, 2018) did not lead to a positive intention to stay. Because green hotels are a composite of their green activities, studying individual activities and their influence should now take centre stage rather than comparing green hotels with their nongreen counterparts. Therefore, we call for future scholars to open the 'black box' of green hotels.

Along these lines, there has been increased research attention in understanding how offering green initiatives is different from getting guests to participate in them. For instance, in a study from Taiwan, Chia-Jung and Pei-Chun (2014) showed that consumers valued service quality and separate toiletries more than green initiatives. They further estimated that consumers expected a discount of $11 to accept the green practices related to water usage. On the other hand, Casado-Díaz et al. (2020) found that consumers were willing to pay a premium of 4.69 Euros at hotels that had water-saving devices installed in the rooms. Similar results were also observed in the United States, where Kuminoff et al. (2010) observed that hotels charge $9–$26 of premiums at green hotels. These mixed findings show a possible conflict in how consumers perceive green hotels and their initiatives and strengthen our call for opening the green hotel black box. Whereas some consumers might see greening as a cost reduction strategy and thus expect a discount, others might see the investments required and are ready to pay more than the normal charges accordingly.

The role of hotel type, too, cannot be ignored. S. Wang, Wang, Wang, et al. (2018) argued for positive behavioral intention due to perceived functional, social and emotional value. However, on the other hand, Peng and Chen (2019) argued that functional, financial, hedonic and image risks lead to hesitation by the consumer. The difference between the two studies is the hotel context. Peng and Chen (2019) studied a luxury hotel where consumers may feel that they deserve a discount if cost-reducing green initiatives were implemented. However, it is unclear what the exact consumer-level factors caused this distinction of perception. More research may thus be needed to explicate the role of hotel type as well. Furthermore, larger firms have also been found to be more adept at implementing green initiatives (Balasubramanian et al., 2021) than smaller ones. We do not know whether such relationships would persist due to firm size in green hotels and, subsequently, whether the perceptions of the same would lead to a difference in adoption motivation in consumers.

4.2.3 | Gaps and future research suggestions

We identify five key limitations spread across the two subthemes:

Consumer level

At the consumer level, we were able to identify two key gaps linked to the customer-level antecedents of adoption and their operationalisation, (a) broad definition of consumer attitudes and (b) Negative antecedents and retractors of positive behaviour have not been adequately investigated.

(a) *Broad definition of consumer attitude towards green hotel*: the current literature defines 'attitude towards green hotel' too broadly as a hotel with green initiatives in place. We believe that this operationalisation considers the green hotel as a 'black box' and considers consumers as having an overall attitude towards the green hotel as compared with a nongreen hotel. This operationalisation is a critical gap as green hotels may have multiple green initiatives in places, and consumers may perceive each of them differently. Furthermore, each of these initiatives may lead to different levels of adoption intentions (Han et al., 2019).

To address this, some recent studies have now started deconstructing the green hotel 'black box' to study the role of initiative-specific attitudes. Attitude towards water conservation (Casado-Díaz et al., 2020) and green purchase (L. Wang, Wong, & Narayanan, 2020) are two noteworthy ones to mention. However, these studies are relatively few and do not cover several other such green initiatives that exist. This distinction between initiatives is essential as consumer attitudes towards them are bound to be different. For instance, a consumer may have a positive attitude towards energy conservation initiatives but may have a negative attitude towards towel reuse (H. Chen et al., 2019). Thus, future studies should deconstruct the green hotel 'black box' further to understand the interrelationship between attitudes and behavioural intention. Consequently, we suggest the following RQs.

(b) *Negative antecedents and retractors of positive behaviour*: another issue requiring attention is that negative attitudes can act as antecedents. For instance, consumers may believe that being 'green' is simply a marketing ploy to charge more. Several green purchase studies in other scenarios, for instance, have noted that 'green scepticism' is rising among consumers (M. F. Chen, 2020; do Paço & Reis, 2012; Leonidou & Skarmeas, 2017). Furthermore, issues like greenwashing are becoming common whereby businesses implement green services and facilities only in places where they can influence consumer perception without actually helping the green cause (H. Chen et al., 2019). Future studies should consider the attitudinal and norm factors that are driven by this green scepticism.

(c) *Role of consumer religiosity on adoption*: a third possible topic of interest is that only two studies have investigated religiosity's role in green hotel adoption. Whereas one argued that Islamic religiosity leads to positive intention, the other argued that only extrinsic (i.e., visible and perceived by others) religiosity influences behavioural intention. However, these results are not sufficient to arrive at a conclusive answer. The results of the studies are still interesting due to three reasons. First, although most of the studies are from primarily Christian countries, none of the studies has investigated how Christian religiosity leads to green hotel adoption intention. Second, of the two studies that explicitly studied religiosity and not from primarily Christian countries, one was in China (L. Wang, Wong, & Narayanan, 2020), and the other study was from Egypt (Agag & Colmekcioglu, 2020). Third, we observed that in the research profile, the focus of studies is now shifting from a primarily western context to Asian countries like China, Taiwan and India. Asian countries, mainly countries like India, are mostly non-Christian in nature.

Furthermore, travelling is now becoming cheaper, and guests from multiple countries (Tang & Lam, 2017) and religious affiliations visit the majority of hotels, making it an interesting question to investigate whether religious affiliation plays a role in green behaviour. Considering the above-mentioned gaps, we suggest the following RQs to examine the customer-level gaps in the antecedents.

RQ2.1. What is the role of attitudes towards individual greening initiatives in adoption intention?

RQ2.2. What is the role of green consumer scepticism in green hotel adoption?

RQ2.3. Do different green initiatives lead to different levels of scepticism and avoidance?

RQ2.4. What is the role of religiosity in green hotel adoption for different religions?

RQ2.5. Are followers of some religions more likely to choose green hotels than others?

External environment

We identified three main gaps in the research addressing the role of the external environment.

(a) *Too much attention on the green hotel as a whole*: in focusing on attitude towards green hotels compared with nongreen hotels, the majority of studies have investigated green hotels as a whole. However, suppose that attitudes towards green hotel initiatives are to be studied. In that case, more attention is needed to identify such issues on the hotel side that can potentially impact consumer motivations. Some studies have already started down this path and have investigated initiatives regarding conservation and waste reduction, including water conservation (Han, Lee, Trang, et al. (2018)), energy conservation (Han et al., 2019) and recycling. However, only a few have investigated the more integrated application of green initiatives like offering green foods and products like cotton fibres instead of non-biodegradable ones (Trang et al., 2019) or refilling shampoo bottles (Millar & Baloglu, 2011). Such initiatives and those that may fall under more than one category thus require more attention.

(b) *Implementation of green initiatives does not always imply increased costs*: Line and Hanks (2016) highlighted that it is often taken for granted that implementing green initiatives is expensive. However, this may not be so. Furthermore, hotels are now aware of the fact that green initiatives are likely to be perceived as a premium offering and may engage in greenwashing to present the image of being a green hotel (H. Chen et al., 2019). Only one study so far has investigated greenwashing's role in consumer trust and behavioural intention (H. Chen et al., 2019), although this was limited to an experimental setup without an actual green hotel setting. Another issue is greenhushing, whereby hotels underreport or underadvertise their cost-saving greening initiatives to avoid creating a negative or cheap image in the consumers' minds. Another

consequence of the assumption that 'green equals expensive' is that it drives the focus on variables like willingness to pay a premium. Considering that going green can also reduce costs, we are left confused as to why studies have not explored the green cost reduction side as a strategy to attract consumers. Furthermore, due to the lack of such studies, we also do not know enough about the marketing and messaging techniques that can be used by hotels to build an 'economic green' image.

(c) *Inherent assumption that consumers will participate in the green initiatives after adoption*: consumers are often unwilling to participate in green initiatives even when they know that participating would lead to a better environmental outcome. Because participation has not been studied often in the literature, we conclude that the consumers' participation postadoption is an inherent assumption in the extant literature. However, the little evidence we do have indicates that consumers consider such participation to be a hurdle in their stay and expect a discount for their cooperation (Chia-Jung & Pei-Chun, 2014). As green initiatives are likely to fail without consumer participation and can thus make a hotel lose its 'greenness', we argue for more studies that investigate participation intentions and behaviour.

After examining the gaps listed above, we propose the following RQs to understand the external factors influencing the consumer perception of green hotels better:

RQ2.6. What are the other green initiatives that consumers notice when staying at a green hotel?

RQ2.7. How do these initiatives influence consumer-level variables to influence behavioural intention?

RQ2.8. What is the role of greenhushing on green hotel image and consumer scepticism?

RQ2.9. How does consumer perception of greenwashing and greenhushing erode consumer-level variables and, subsequently, their behavioural intention?

RQ2.10. What are the factors that lead to unfavourable participation from consumers?

RQ2.11. What are the different incentive mechanisms required to ensure participation without losing the consumers' willingness to pay a premium?

RQ2.12. What are the communication strategies that hotels should use to ensure consumer participation?

4.3 | Green hotel adoption behaviour: Moderators

A moderator is a factor that influences the relationship between two other factors. Speaking from a modelling perspective, a moderator increases or decreases the slope of a function. We identified

several moderators that have been studied in the extant literature and divided them into two categories: (a) consumer-level moderators and (b) contextual moderators. Consumer-level moderators consist of either demographic moderators like age (Chia-Jung & Pei-Chun, 2014; Kang et al., 2012), nationality and gender (Kang et al., 2012) or psychographic moderators like environmental knowledge (Gupta et al., 2019; Peng & Chen, 2019) and personality traits (Agag & Colmekcioglu, 2020). Another interesting consumer-level moderator explored was whether the purpose of travel was casual or for business (Gupta et al., 2019). Some attention has also been given to stages of loyalty (Grubor et al., 2019). However, Gupta et al. (2019) observed that the role of loyalty was insignificant for Indian travellers. Other moderators discussed were from the hotel's perspective, including destination images (Line & Hanks, 2016) and hotel type. However, only one study considered the moderating influence of hotel type, even though many studies captured this variable (Sahin et al., 2020).

4.3.1 | Gaps and future research suggestions

The current literature has examined a variety of contextual variables that make (a) consumers differ from each other and (b) green hotels and country contexts differ from each other. However, these differences are not considered separately in the analysis, representing a gap in the moderators' adoption. We thus identify two main gaps.

(a) *Considering a heterogeneous customer sample as homogenous:* Although gender, age and income are collected in almost all quantitative studies, only a few studies have considered these a moderator of interest. Furthermore, only a few studies have even considered them as a control variable. Those who have done so, however, have reported that consumer gender is a significant moderator of both internal and external factors influencing adoption (Y. J. Kim et al., 2012). Thus, it is pertinent that future studies consider these factors in their analyses.

Another demographic variable that has been captured but not utilised is consumer nationality. Research on three-star hotels and above usually collects data from consumers of multiple nationalities (Tang & Lam, 2017). However, these data have not been used in the analysis. Considering that different countries have different cultural contexts and, thus, distinct consumer behaviour, this represents an opportunity for understanding how a consumer may behave differently depending on the host country. Thus, we argue that this is an important opportunity to draw interesting insights.

Some studies have also considered the role of psychographic moderators like idealism and relativism (Agag & Colmekcioglu, 2020), whereas others have explored consumers' external perception of the environment (Martínez García de Leaniz et al., 2018) and green hotel knowledge (Peng & Chen, 2019). However, there is still a considerable lack of knowledge regarding the moderating role of personality types in adoption. We thus propose the following RQs to advance the literature in this area.

RQ3.1. What is the moderating influence of gender, age, and income on different green hotel adoption behaviours?

RQ3.2. How do green attitude, SN, PBC, values, and beliefs vary across the moderating factors?

RQ3.3. What is the moderating role of guest nationality in deciding adoption behaviour?

RQ3.4. Is a guest in a familiar host country culture more likely to adopt than a guest in a non-familiar host culture?

RQ3.5. What is the role of consumer personality type in adoption decisions?

(b) *Not recognising the heterogeneity of green hotels and country contexts:* The adoption intention has also been observed as varying based on two contextual factors: (a) country context and (b) hotel context. Choi et al. (2009) used the example of Greece and the United States to argue that the country culture influences green hotel behavioural intentions like visit intention and willingness to pay a premium. However, considering that both countries are from the developed world, more studies are needed to understand these relationships from a more extreme country classification. Some examples of this may be developed versus developing countries or classifying countries based on their institutional support for green initiatives. The following questions are proposed to explore this area further.

RQ3.6. What is the moderating role of country culture in deciding consumer adoption?

RQ3.7. What is the role of hotel type in deciding consumer culture?

Some categories of hotels that may be used as moderators are casual hotel versus luxury hotel, comparison between different star levels (e.g., three stars vs. four stars), green-certified versus not certified, chain affiliated or not, integrated restaurant or not and integrated resort or not.

4.4 | Green hotel adoption behaviour: Methodological considerations

We presented the methodological summary in the research profile section. This section highlights the various gaps that have emerged across two main issues: (a) research design and methods and (b) scope of the studies.

4.4.1 | Research design and methods

(a) *Overdependence on quantitative methods*: the analysis of the selected studies showed that 73 studies adopted a quantitative

method to investigate the RQs. This lack of qualitative studies indicates that the literature on consumer adoption behaviour in green hotels is currently adapted from the main consumer behaviour literature without many specific changes to tailor it to the hotel context. Future research may consider using qualitative analyses to delve deeper into questions addressing consumer behaviour. It would be interesting to see whether such studies yield different results or further describe the mechanisms through which green hotel consumers make decisions. Furthermore, surveys may also fail to capture actual intentions as people may respond positively to the issue as they are not being monitored. An ethnographic or action research-based study can thus highlight the actual difference between intention and behaviour.

(b) *Use of -adopter data*: nonprobability sampling seems to be a norm in research, with several studies reporting the difficulty of finding a sampling frame as well as respondents in general (L. Wang, Wong, & Narayanan, 2020). Accordingly, some studies have reported using email and internet-based surveys that are often self-administered (Nimri et al., 2020; L. Wang et al., 2019; L. Wang, Wong, & Elangkovan, 2020). Although this purposive sampling and self-administration make it easier to collect data, these run the risk of having a nonrepresentative sample and self-selection bias.

Some studies have claimed to solve this issue by using services like Amazon Mechanical Turk (MTurk), which allow access to a virtual panel of participants, or by conducting surveys with the help of a market research company. Indeed, several studies reported such companies' role in providing possible sample frames as these usually possess a large dataset of hotel consumers (Agag & Colmekcioglu, 2020). However, only a few studies provided details of the company and dataset provided by the market research firm (e.g., Assaker et al., 2020). Therefore, it is unclear whether such data are entirely reliable. Some platforms of data collection that have become popular in recent years are MTurk (Ahn & Kwon, 2020; H. Chen et al., 2019; Gao & Mattila, 2016; Line & Hanks, 2016; Yadav et al., 2019), Qualtrics (Nimri et al., 2020; Sahin et al., 2020), WJX China (Jiang & Gao, 2019), Prolific Academic (Balaji et al., 2019) and My3Q (M. F. Chen & Tung, 2014). However, because most of these platforms allow for voluntary participation for incentives, they can still lead to self-selection bias. Furthermore, these platforms would only capture the population sample that has access to the internet and uses computers and mobile phones. The sample is thus likely to be biased and may not reflect the actual opinion of the population. More studies should thus be conducted with real data collected in-person at hotels.

(c) *Lack of studies using longitudinal data*: all of the sample studies used cross-sectional data due to their survey design and over-dependence on structural equation modelling (SEM). Studies have shown that behavioural intention can influence behaviour over time or through several stages. For instance, Han et al. (2019) showed using the loyalty chain stages theory that loyalty happens through three stages: cognitive, affective, and conative loyalty. Furthermore, studies like Grubor et al. (2019) have demonstrated that behavioural

intention can occur through various phases of decision making (pre, during and post). Such relationships are better investigated utilising longitudinal data. Researchers should thus identify better ways to collect reliable longitudinal data like partnering with hotels or booking aggregators. We propose the following RQs for future scholars' consideration.

RQ4.1.1. Do the results from the qualitative inquiry of adoption match with the results of quantitative inquiries?

RQ4.1.2. Are results consistent when longitudinal data are used?

RQ4.1.3. How does green hotel adoption decision making vary over time?

4.4.2 | Research scope

Though we have research results from over 23 different countries, the generalisability of these studies is a major concern due to their limited scope regarding: (1) their country context and (2) the hotel context. We propose that both of these factors can be significant antecedents or moderators to consumer behaviour towards green hotels.

(a) *Not considering the country context of the hotel and guests*: only one of the 76 studies was comparative in nature and had data from multiple countries. The remaining studies investigated consumers in a single country context alone. Several studies in our sample were aware of this limitation (Bashir et al., 2019; Eid et al., 2020; L. Wang, Wong, & Elangkovan, 2020), acknowledging that consumer behaviour is a function of culture and that people of different nationalities show different behavioural tendencies (Im et al., 2011; Zhao & Khan, 2013). Therefore, the literature on green hotels can benefit from conducting more cross-cultural comparisons of consumer behaviour. Particularly, it would be interesting to compare countries based on their Hofstede's cultural indices (Hofstede & McCrae, 2004) or by emerging versus developed markets. Such studies are currently missing in the extant literature.

(b) *Not considering the hotel context*: a second way we believe that current studies are suffering from the limited scope is the type of hotel studied. Only three studies in the sample made an explicit effort to study the type of hotel's role. Furthermore, the majority of the studies did not mention the type of hotel in which the study was conducted at all. This may be because most of the studies were conducted through an online survey and not in an actual hotel. In fact, some studies recognised this limitation by noting that their study did not investigate actual green hotel behaviour as it was not done in a hotel setting (J. S. Lee et al., 2010; Tan et al., 2020; J. Wang, Wang, Xue, et al., 2018). As mentioned in previous themes, hotel context can be both an exciting moderator and an antecedent to consumer behavioural antecedents. Future studies should thus explicitly mention the hotel context used and conduct their studies in actual hotels.

Furthermore, it would also be interesting to see comparative studies between different hotel types.

We propose the following two RQs to address the lack of studies with a broader scope. We also call for more comparative studies to better understand how one green hotel differs from others and how consumers and hotels in one country vary from their counterparts.

RQ4.2.1. Does consumer intention to visit green hotels vary by country culture and the institutional environment?

RQ4.2.2. How does consumer behaviour vary in different types of green hotels?

5 | FRAMEWORK

In this section, we present the findings of our review in a unifying framework to argue that the decision to adopt green hotels passes through multiple theoretical perspectives and that the application of one theory (e.g., TPB or VBN) alone will result in only a partial explanation (Eid et al., 2020). It is important to be aware of the antecedents to beliefs and attitudes because, at present, most of the studies in this area have assumed that such attitudes exist without pondering on their causes. We believe the theories currently used are too inward looking to accomplish this task. Therefore, we adapt the stimulus–organism–response (SOR) framework to build a unifying framework. SOR is an ideal framework as it provides an overarching theoretical framework that encapsulates the intellectual structure of the prior

literature, as observed by this review. It also effectively encompasses the various antecedents, moderators, mediators and outcomes, which is shown in Figure 5. By doing so, we seek to tie together various arguments put forth in out thematic analysis and gap identification. Therefore, subcomponents of the model are reflections of the themes and gaps we extracted from them.

The SOR framework was initially proposed by Mehrabian and Russell (1974). The framework tries to understand how an 'organism' will 'respond' to a perceived 'stimulus'. The organism in our case is the consumer who wishes to engage with green hotels. The 'stimulus', meanwhile, is some kind of external factor that is imposed upon the 'organism', which arouses them to respond (Eroglu et al., 2001). The organism component captures all of the mental processes and intervening factors that the organism does to make sense of the stimuli and arrive at a response (Kamboj et al., 2018). The framework has now become popular in consumer behaviour research, particularly in regards to green buying behaviour (Sun et al., 2020; J. Wang, Wang, Xue, et al., 2018).

Accordingly, our framework also consists of three components: (a) stimulus—the external factors perceived by a consumer, (b) organism—the mental model or heuristic that is a function of all the consumer-level factors and (c) response—the consumer's behavioural intention towards adopting green hotels. We call our framework, 'Consumer Adoption of Green Hotels' (CAGH). We advance the framework with a call for more multitheoretic and multifaceted studies that can shed more light on the consumer adoption of green hotels by (a) taking a deeper look at green hotels by opening the black box of what we call the 'green hotels'; (b) delving deeper into how consumers form perceptions, attitudes and beliefs that ultimately lead to their decision-making heuristics regarding green hotels; (c) looking
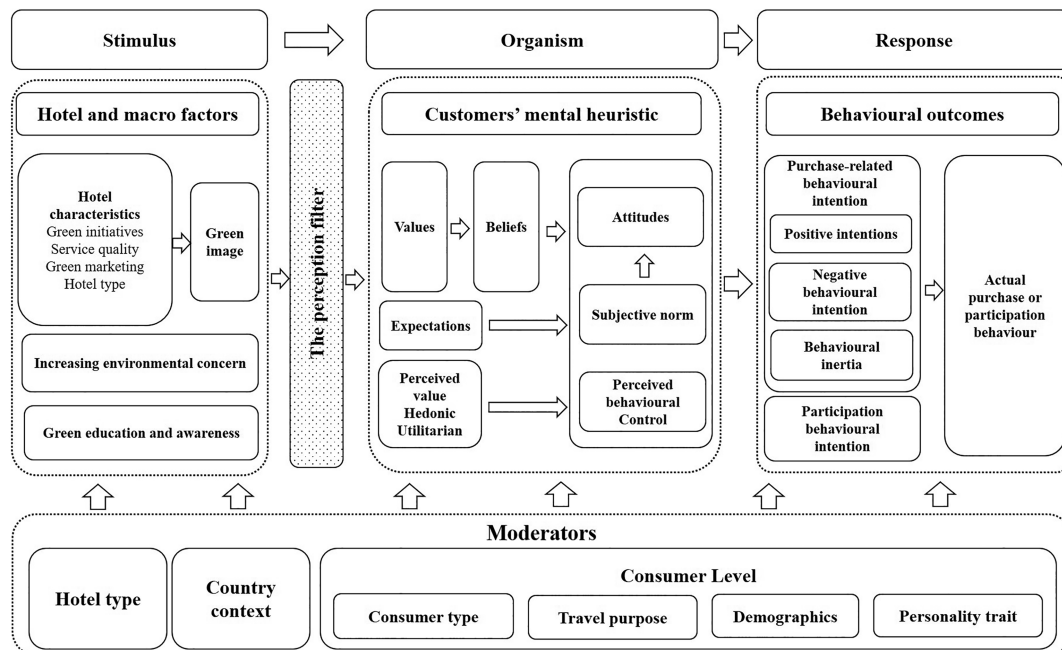

FIGURE 5 The consumer adoption of green hotels framework

beyond just the intentions and studying actual adoption or non-adoption and (d) identifying and explicating the role of contextual factors like hotel and country context. The different blocks of the framework correspond to the above goals. The description of each block is presented below.

5.1 | Stimulus

The stimulus block of the framework does not directly influence adoption. These are the factors on the outside that invoke a consumer's response about green hotels. This block consists of two main factors: hotel-level factors and general macroeconomic factors. The extant literature has shown that hotel activities, service quality and initiatives can influence the consumer-level antecedent of adoption. Furthermore, the consumer's general awareness of environmental issues and environmental education can also drive their perceptions. This block thus represents the decision-making environment of the consumer. Most of the studies in the sample began their analyses of antecedents from the consumers' beliefs, attitudes, SN and PBC. However, our framework suggests that it is important to step further back to understand how these internal variables and impressions are created. For instance, studies have argued that environmental concern and awareness of environmental consequences can lead to behavioural intention (Choi et al., 2015; Eid et al., 2020). But how did the consumer reach this state of awareness? What were the sources of information they used, and did their level of awareness vary based on these sources? All these questions require further attention and should be connected to the organism and, finally, the consequences (response) block.

5.2 | Organism

The stimuli are uniquely perceived by the consumer through a filter driven by a multitude of moderating factors. The perceived information from the stimuli drives the consumer-level decision-making heuristic. Combining several theoretical perspectives, including TPB, VBN and BRT, among others, we argue that consumers' internal decision-making heuristic is complex and run by several interacting values, beliefs, attitudes, norms and PBCs. The same has been discussed in Section 4.2.1.

5.3 | Response

After processing the external information, the consumer arrives at an intention and, consequently, a behaviour (Fishbein & Ajzen, 1975). Here, we argue that scholars should focus on three different types of behaviour. The first is positive behavioural intentions or why consumers adopt green hotels. The second is negative behavioural intention, whereby studies can investigate why consumers avoid adoption. Finally, scholars should consider consumer inertia and ask why consumers are not willing to behave differently towards green hotels.

5.4 | Moderators

Our results indicate that existing research can gain from recognising the heterogeneity of three main factors: (a) the hotel, (b) the country context and (c) the customer, which the current literature acknowledges in a very limited way. We propose that these moderators can influence relationships at all levels of the SOR model by changing how stimuli are perceived and how perception leads to behaviour. Consideration of these moderators is thus expected to provide a more complete picture of why consumers adopt green hotels. However, it is also important to recognise that these factors can also act as antecedents to the consumer heuristic—particularly the country context and consumer-level traits like gender, age and personality.

6 | IMPLICATIONS

6.1 | Theoretical implications

The current review contributes to the existing stream of literature in five key ways. First, although there have been reviews addressing environmentally sustainable behaviour in the hospitality setting (Gao et al., 2016), ours is one of the first reviews to address the adoption of green products and services in a green hotel setting. In doing so, we highlight the key outcomes, antecedents, moderators and mediators that have been used in the literature and suggest other factors requiring further attention.

Second, our review is timely and renders structure to a growing body of literature. In fact, Gao et al. (2016) noted that there were only 26 quantitative studies in this domain in 2015, and Myung et al. (2012) showed that the number was only 12 in 2012. As of this article's writing (January 2020), there are now 76 studies addressing consumer adoption behaviour in green hotels, indicating an explosive growth of studies guided by an increasing awareness of environmental issues.

Third, we identify key limitations in terms of understudied variables and moderators and suggest some possible future RQs to address these gaps in our understanding. We further call for the opening of the 'green hotel' black box. Extant studies have studied green hotel adoption with an implicit comparison to nongreen hotels. However, with more and more hotels adopting green initiatives (Greenview, 2018), the time is now right to more closely examine what constitutes a green hotel. Particularly, we call for further studies to break out of the 'adding green enables charging a premium' mindset to consider the cost-saving nature of some green initiatives and how they impact consumer adoption and perception. We also highlight the limitation of a country- and hotel-level scope of this domain and call for more studies that investigate such differences in green hotels.

Fourth, we present an overview of the research in the area and highlight a shifting trend of studies in sustainable hospitality. Myung et al. (2012) observed that there were only 12 research articles from the Asian region in total, including studies that did not study green

hotel adoption. Our review found that there are 31 studies now on the issue of consumer behaviour alone from Asian countries, with 24 of these published in the last 5 years (2015–2020). Furthermore, we also derived the most prominent outlets for such publications and emphasise the need for more qualitative studies in the area. We urge qualitative researchers to study consumer behaviour in-person rather than through experimental and simulation setups to understand actual behaviour rather than intention, which the current quantitative paradigm overstudies.

Finally, we consolidate our results into a unified model of consumer adoption in the framework presented in the previous section. Through this framework, we enhance the internal versus external framework advanced by Gao et al. (2016) with a model based on the SOR framework. We believe that the framework is now more complete and provides a more comprehensive answer to the question, 'why do consumers adopt green hotels?' Through this framework, we call for more multitheoretic studies in the area and encourage future scholars to move beyond TPB and TRA to adopt a more comprehensive theoretical lens that captures both the internal and external antecedents to green hotel adoption.

6.2 | Managerial and policy implications

Our review provides several managerial and policy implications. First, we show that even though the evidence has suggested that greening leads to a higher willingness to pay, it is not a guaranteed way of differentiating a hotel enough to be able to charge a premium. In fact, depending on the type of initiative, customers may expect discounts instead (Chia-Jung & Pei-Chun, 2014). Hotels can thus find more effective ways to communicate the differences in green initiatives that save costs or require investment, which may enable consumers to have a better image of the hotel and lead to improved trust accordingly (Balaji et al., 2019). This, in turn, holds important implications for pricing strategies. Hotels can provide discounts to consumers who opt-in for cost saving, environmentally friendly initiatives like towel reuse or shampoo refills, thus ensuring higher participation and greater savings in the long run.

Second, we highlight the increasing acceptance of green hotels in Asia. This study should serve as a call for hotel managers in Asian countries to start adopting green hotel practices to give customers the more environmentally responsible stay that they may desire. Third, the review highlights the role of hotel type in deciding the consumer perception of green initiatives. Luxury hotels, in particular, should be careful about implementing green initiatives as these may lower the functional and hedonic value perceived by consumers (Peng & Chen, 2019). However, similar influences were not found in other types of hotels, implying that higher expected value drives the propensity to be hesitant. Thus, luxury brands should focus only on implementing cost-saving initiatives that do not diminish the perceived value of their consumers. An example of this would be recycling programmes, which save costs in the backend but are not evident to the customer. Importantly, there is no one strategy that is

one-size-fits-all for the hotel industry. Instead, the initiatives to be implemented are also dependent upon the type of hotel and the country context. Managers should thus identify their hotel type and implement appropriate strategies based on their hotel type.

Fourth, the above-stated implications and suggestions are often wishful thinking. Ample evidence has indicated that greenwashing and greenhushing are present in green hotels (H. Chen et al., 2019; Peng & Chen, 2019). These unethical business practices can have serious implications for consumer rights but can be addressed by setting up policy-level initiatives to determine concrete guidelines for defining, standardising and rating green practices. Although such certifications already exist (Millar & Baloglu, 2011), more may be needed to highlight specific green initiatives. Defining at the policy-level can further help hotels communicate that they are green entities, thereby addressing the issue of consumer ignorance regarding what constitutes green hotels (Karavasilis et al., 2015).

7 | LIMITATIONS, FUTURE RESEARCH AND DIRECTIONS

The current review has a few limitations. First, we did not include editorials, reviews, conference proceedings and any non-peer-reviewed literature to ensure the reliability and validity of the review. We also did not include articles that were not in English. As such, we concede that some work of significance may have existed in these sources. Second, even though adequate care was taken to reduce biases, with initiatives like multiple people coding the research papers and using qualitative data analysis software to keep track of changes, inadvertent human error may still have crept into the analysis. Third, the current review was focused on green hotel adoption behaviour. Future studies can explore SLR opportunities in adjacent areas like green restaurant adoption to identify consumer motivation. Studies may also adopt a broader scope to review if consumer motivations differ in restaurant and hotels. Finally, due to the study's focus on adoption intentions, we did not delve into the methodological shortcomings of the studies sufficiently. We, therefore, suggest that future researchers conduct detailed methodological reviews to suggest new methodological advancements in the area.

The purpose of this review was to analyse and synthesise the body of literature on the consumer adoption of green hotels to derive a few key conclusions. First, the emergence of studies on the Asian context is a notable development that requires greater attention. Second, we used our thematic analysis to explicate the key outcomes, antecedents, mediators and moderators of consumers' green hotel adoption and touched upon the methodological considerations and limitations of the studies. By doing so, we render structure to a field that has now grown substantially. We argue that it is essential to consider how consumers develop their attitudes and beliefs about green restaurants rather than just assuming such attitudes towards green hotels just exist. The review of the extant literature further revealed that external components are perceived by the users in different ways, which influences their internal beliefs, values, attitudes, SN

perceptions, PBC and expected values. Moreover, we argue that it is critical that scholars open the black box of 'green hotels' to consider individual initiatives and the 'degree of greenness' rather than considering the perception of the green hotel as a monolith alone. Along those same lines, the time is also right to examine this 'degree of greenness' between green hotels than simply comparing green hotels to conventional, nongreen hotels.

Our review also advances the need for more context-specific qualitative studies and studies utilising actual behaviour data to study the impact of the explicated antecedents and the mediating and moderating factors on actual consumer behaviour rather than just intentions. We argue that a variety of consumer-level, hotel-level and cultural factors act as moderators and antecedents of these green hotel adoption decisions.

We also discussed why the green hotel literature needs to adopt from the domain of green scepticism to study negative attitudes and motivations in the adoption of green hotels. Given that consumer participation is essential in implementing green practices, we believe that this variable requires further attention which is why we have included it in the framework. Finally, we present a comprehensive research framework that adapts to the SOR framework to give a bird's eye view of the research area to guide future researchers and practitioners.

CONFLICT OF INTEREST

The authors do not have any competing interests to declare.

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