How green marketing, perceived motives and incentives influence behavioral intentions

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A R T I C L E   I N F O

A B S T R A C T

This study contributes to exploring the effects of regulatory fit with green marketing messages on consumer behavioral intentions by examining the moderating roles of perceived motives of green initiatives and perceived incentive mechanisms. Experiment 1 explores the effects of regulatory fit and non-fit on behavioral intentions in terms of the different types of green marketing messages. Experiment 2 explores the moderating effect of perceived different motives of green initiatives on the link between promotion/prevention regulatory fit and behavioral intentions. Additionally, Experiment 3 examines the moderating effect of perceived different incentive mechanisms on the relationship between promotion/prevention regulatory fit and behavioral intentions. Based on these findings, theoretical and managerial implications are discussed.

1. Introduction

Tourism and leisure activities have proliferated and become important parts of modern life. Thus, when consumers engage in tourism and leisure activities on their travel itinerary, hotels make an essential contribution to the overall visitor satisfaction at a particular destination (Presbury et al., 2005). However, because hotel development depends on an abundance of natural resources, an important issue for hotels is to reduce the destruction of the environment while they are operating (Wang, Wang, Wang, Yan and Li, 2018). Therefore, along with rising environmental awareness, increasingly more people care about the problem of environmental degradation, which has caused the hotel industry to become aware that the market is changing dramatically, thus creating "green hotels" (Han et al., 2010).

Due to the environmental issue constantly being at the forefront of attention and with the green consumption generation having arrived, enterprises are also actively implementing green marketing in response to market demand (Wang, 2017). Thus, by implementing green marketing and sending messages related to the use of green products, one can make consumers feel the benefits of green consumption (e.g., the impact on social benefits, such as health, environment, and future generations), which can facilitate consumers in moving from intention to action (Litvine and Wüstenhagen, 2011; Wei et al., 2018) and establish their awareness and understanding; they can then benefit the brand through purchasing intentions and brand selection (Ruiz and Sicilia, 2004). Jiang and Kim (2015) have shown that consumers' interpretation of green marketing messages influences their behavioral intentions toward business. Thus, the use of green marketing messages to facilitate positive consumer behavioral intentions is important when conducting green marketing (Blose et al., 2015; Grazzini et al., 2018) and is an important research focus of the present study. As concluded by Line and Hanks (2016), environmental sustainability is an important issue in the hospitality and tourism industry, and researchers should pay more attention to understanding consumer attitudes, evaluations, and behaviors toward green hotel products and services.

Previous studies have suggested that the concept of "regulatory focus theory (RFT)" should be applied in message construction to understand how consumers interpret received messages differently (e.g., Lin, 2011; Hsu and Chen, 2014; Hsu et al., 2017; Zhang et al., 2018). RFT (Higgins, 1997) argues that promotion-focused consumers are particularly sensitive to the presence or absence of positive outcomes, whereas prevention-focused consumers are particularly sensitive to the

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presence or absence of negative outcomes. The difference in related marketing messages in terms of gain-structure messages versus loss-structure messages might have different effects on consumers' brand attitudes and choice behavior (Wang and Lee, 2006). That is, when the marketing messages are the same as people's current targets, they can enhance their persuasive effects (Avnet and Higgins, 2006). Although previous studies have represented the complexity of green hotel choice behavior (Jiang and Kim, 2015), little research has investigated green hotel choices in terms of the regulatory fit effect.

In addition, consumers with different regulatory foci might have different behavioral intentions regarding the received marketing message, and these moderating variables that may influence consumers' regulatory focus should also be taken into account (Lin, 2011). For instance, a firm's motives (e.g., Gao and Mattila, 2014) or incentive mechanisms (e.g., Huang et al., 2014) in engaging in green marketing practices, as perceived by consumers, could be important considerations that influence consumer behavioral intentions. The first is consumers' perception of firms' motives, particularly the consumers' perceptions of a hotel's green marketing practices, which has public-serving and self-serving aspects. Consumers' perceived motives of green initiatives (CPMGI) means that when consumers assess the green initiatives of a hotel, they may infer the company's motivation to participate in corporate social responsibility (CSR) (Gao and Mattila, 2014). CPMGI can be divided into *public-serving* and *self-serving* aspects that can significantly affect consumers' attitudes, purchasing intentions, and word-of-mouth (Gao and Mattila, 2014). In this study, the moderating role of CPMGI is examined to explore how it interacts with regulatory focus and thus influences consumers' behavioral intentions toward green hotels.

Furthermore, a hotel providing the incentive mechanisms may influence consumers' motivations and behavioral intentions because motivation is the original power that induces consumers to act (Kotler and Armstrong, 1999). Nevertheless, the motivation crowding effect (MCE) indicates that the individuals' intrinsic motivation could decrease due to extrinsic cash interventions (Frey and Oberholzer-Gee, 1997). That is, when people initially voluntarily devote themselves to activities but also obtain an extra payment, they decrease their voluntary activities (Frey and Götte, 1999). Therefore, consumers' perceived incentive mechanisms (CPIM) in terms of MCE can be categorized into *cash discount incentives* and *environmental protective alternatives*; these two motives significantly influence green consumer behavior (Huang et al., 2014). In this study, the moderating role of CPIM is explored to investigate how it interacts with the regulatory focus and thus influences consumers' behavioral intentions toward green hotels.

As shown in Fig. 1 below, exploring how consumers with different regulatory foci (promotion-focus vs. prevention focus) may provide deeper insights into how hotels should conduct their green marketing and provide hotel operators with a reference on effective ways to do so by designing different green marketing messages in accordance with different types of consumer characteristics. Furthermore, understanding the effect of CPMGI and CPIM on behavioral intentions can help businesses formulate their strategies and marketing to facilitate the implementation of green marketing to be more competitive on the market.

2. Literature review and hypothesis development

2.1. Regulatory fit effects

Regulatory focus theory (Higgins, 1997) suggests that distinct motivational systems govern people's drive to attain desired outcomes. As proposed by Arnold and Reynolds (2009), promotion-focused people tends to focus on achievements and aspirations, and desired goals and life events are a set of gains or non-gains. In contrast, prevention-focused people tend to be safe and vigilant, and goals and life events are a set of losses or non-losses. The findings of Hsu and Chen (2014) suggest that people who have a different regulatory focus are induced to choose

the information they trust to help them achieve their goals. Thus, people's different goals will drive them to choose the information that they trust in to achieve their goals (Higgins, 1997). Accordingly, hotels' green marketing messages could have a gain-structure (e.g., *choosing to stay in a green hotel* can persuade consumers that they will gain the opportunity to implement environment conservation-promoting behavior), or a loss-structure (e.g., *choose not to stay in a green hotel* means the consumer would lose the opportunity to implement environment conservation-promoting behavior). Jung and Yoon (2015) concluded that the strategic disposition of people with a promotion focus is to approach a goal with enthusiasm, whereas people with a prevention focus are generally avoidance motivated and have a safety or a vigilance orientation consistent with an individual's required tasks.

Previous studies (e.g., Hsu et al., 2017; Mayer and Tormala, 2010; Crow et al., 2019) have suggested that when a regulatory fit occurs, it will produce better marketing effects on consumers. That is, when there is a regulatory fit, the individual will have the "it-just-feels-right" feeling. As a result, the individual will have more confidence and thus change his/her attitude or behavior. Lee and Higgins (2008) claim that consumers will be more involved in an activity when they experience a regulatory fit, which implies that consumers' behavioral intentions are highly motivated when they experience a regulatory fit. Consequently, behavioral intentions are regarded as the outcome variable that refers to the affirmed likelihood of engaging in a certain behavior, including purchasing behavior, repeat purchases, and word-of-mouth (Oliver, 1996). Accordingly, the following hypothesis is proposed:

H1. The regulatory fit condition has a significantly greater impact on consumers' behavioral intentions toward a green hotel than the no regulatory fit condition.

2.2. Perceived green initiatives as a moderator

Corporate social responsibility (CSR) initiatives have often served businesses as a source of competitive advantage (Rhou et al., 2016). Specifically, green initiatives help the hotel industry gain competitive advantage (Singjai et al., 2018). Green marketing has been adopted by hotels as a mechanism to perform CSR. Although hoteliers are striving to achieve financial performance by practicing green marketing, gaining the trust and meeting the expectations of the public has become more challenging (Punitha and Rasdi, 2013). Therefore, the perceived corporate motives (public-serving vs. self-serving) determine how consumers look upon CSR initiatives performed by the firm (Gao and Mattila, 2014). As noted by Karaosmanoglu et al. (2016), when consumers think that a company conducts a CSR activity with a public-serving motivation, they demonstrate more positive behavior toward this company than in the situation when they think that it conducts a CSR activity only because of firm-serving motivations.

In other words, when consumers process messages that match his/her regulatory focus, they experience an increase in enthusiasm and motivation (Avnet and Higgins, 2006). Thus, consumers are likely to have a positive behavioral intention towards a green hotel when they think that their actions can have a positive impact on the environment (Line and Hanks, 2016). Therefore, if the consumers, regardless of the presence of a promotion or a prevention regulatory fit, perceive that companies are *public-serving*, they will find green marketing messages as more appealing and facilitating their behavioral intentions, because their main ultimate interest is in environmentally friendly appeals. On the contrary, if the companies are *self-serving*, this will lower the relationship between the regulatory fit and behavioral intentions. Thus, it can be inferred that when consumers perceive the motives of the hotel as public-serving, this will positively interact with their regulatory fit and then enhance the consumers' behavioral intentions. In contrast, it can also be inferred that when consumers perceive the motives of the hotel as self-serving, this will interact negatively with the regulatory fit and weaken consumers' behavioral intentions. Accordingly, the
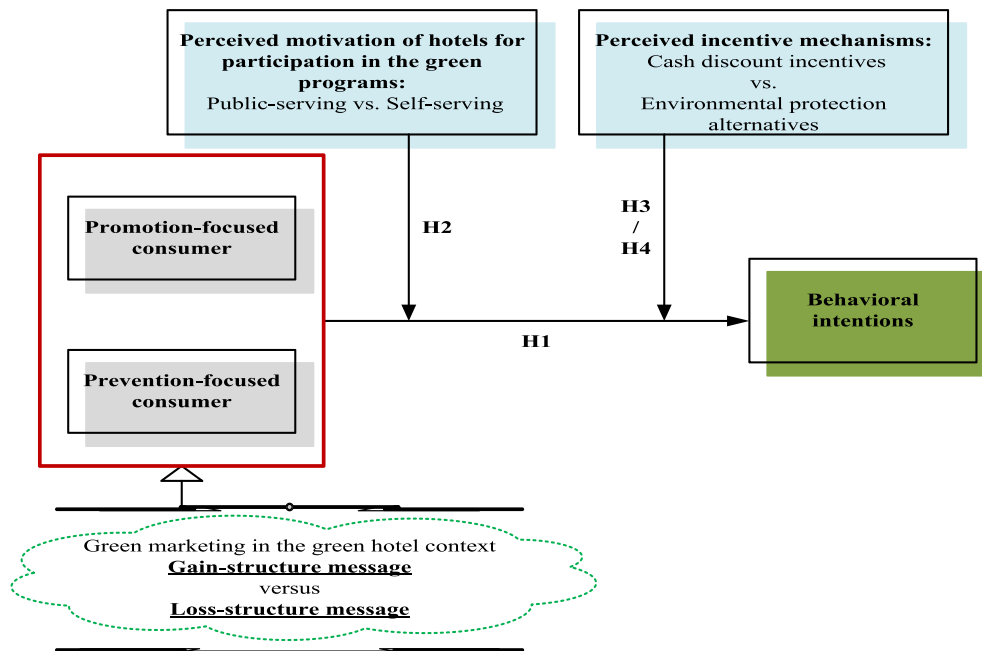
Fig. 1. The conceptual model.

following hypothesis is proposed:

H2. The relationship between the regulatory fit and consumers' behavioral intentions toward a green hotel will be greater when consumers perceive the hotel's motives as public-serving rather than self-serving.

2.3. Perceived incentive mechanisms as a moderator

The crowding-out hypothesis (Frey, 1992; Frey and Oberholzer-Gee, 1997) holds that the effects described might also outweigh the stimulating effect of monetary incentives and thus reduce a person's propensity to engage in a desired activity (Rode et al., 2015). In other words, this is a case of making use of an extrinsic monetary substance designed to be an incentive mechanism that tries to inspire individuals to do what they originally wanted to do intrinsically. However, if the use of extrinsic incentives causes a negative effect on intrinsic motivation, it will produce a crowding-out effect called the "incentive crowding effect"; that is, extrinsic motivators, such as monetary incentives or punishments, can undermine the intrinsic motivation (Huang et al., 2014; Putra et al., 2017; Ting et al., 2019). In a study by Huang et al. (2014), it was found that slight cash discount incentives did not have a significant moderating effect on the relationship between consumers' environmental awareness and their green consumer behavior. This can be used to explain the case in which the traveler initially responds to environmental awareness and green values voluntarily, but when the hotels offer discounts (e.g., $1 dollar) as a reward for environmental production, some travelers do not feel grateful and in fact produce an opposite effect (Krakovsky, 2008).

As proposed by Jiang and Kim (2015), before marketers begin designing a green marketing campaign, they should stand input themselves in their consumers' shoes and ask: "what green hotel advantages are the most relevant to the target market?" Since consumers with a promotion regulatory fit actively pursue environmental protection, if they find themselves in the condition of the cash discount incentive, which means "a little" cash discount and which also means that there is not much of a percentage of discount, then the lodging travelers will not be affected by this or change their attitude (Huang et al., 2014). Thus, it can be inferred that the relationship between the promotion regulatory fit and consumers' behavioral intention is not affected by cash discount

incentives.

However, consumers with a prevention regulatory fit regard environmental protection as a responsibility and an obligation, and yet their consumer satisfaction and comfort conflicts with those hotels that are developing green practices (Ahn and Pearce, 2013). Thus, the protection of resources such as water and energy will reduce consumer experience and comfort (Kirk, 1995). Thus, if they are in the condition of a cash discount incentive, living in a green hotel might cause them to "lose enjoyment." A cash discount can meet the goal or accomplish the responsibility and obligation, which consumers with a prevention regulatory fit are happy to see. Therefore, it can be inferred that the relationship between a prevention regulatory fit and consumers' behavioral intentions would be significantly strengthened by the moderating role of cash discount incentives. Accordingly, the following hypothesis is proposed:

H3. When a hotel suggests a cash discount when implementing its green marketing practices, consumers with a prevention regulatory fit will be induced to have greater behavioral intentions toward the hotel than consumers with a promotion regulatory fit.

On the other hand, in the condition of environmental protective alternatives, when consumers process messages that are in accordance with their regulatory focus, they will increase their enthusiasm and motivation (Avnet and Higgins, 2006). Therefore, it can be inferred that a greater perceived environmental protective alternative of a firm makes the effect of the promotion regulatory fit on behavioral intentions stronger. Nevertheless, in the condition of environmental protection alternatives, consumers with a prevention regulatory fit fulfill their environmental responsibility anyway; therefore, their attitude does not change much. Therefore, the relationship between the prevention regulatory fit and consumers' behavioral intentions is not significantly moderated by environmental protective alternatives. Accordingly, the following hypothesis is raised:

H4. When environmental protective alternatives are provided by a hotel when implementing its green marketing practices, consumers with a promotion regulatory fit will have stronger behavioral intentions toward the hotel than consumers with a prevention regulatory fit.

3. Research methods

3.1. Participants

This study adopts experimental methods that use the Random-Stimulus-Response procedure (Chang and Tarn, 2008) to examine the proposed hypotheses. Questionnaires were distributed online using a convenience sampling method, and each successive questionnaire was randomly assigned a scenario. Each participant only participated in the survey for one scenario. Screening questions at the beginning of the survey identified target subjects who had visited any hotel at least once in the recent six months. Qualified respondents were invited to review the green marketing practice-related messages and to measure their responses. Prizes were provided to incentivize respondents to fully complete the questionnaire. The three experiments are discussed below.

3.2. Experimental design

3.2.1. Experiment 1

A 2 (regulatory focus: promotion vs. prevention) × 2 (gain-structure message regarding green marketing vs. loss-structure message regarding green marketing) between-subjects design was used to examine proposed Hypothesis 1, as shown in Table 1.

Procedure: First, subjects read a hotel's green marketing message from the perspective of gain-structure or loss-structure and then answered the items regarding their regulatory focus. Subsequently, they were asked to answer the items regarding their behavioral intentions toward the green hotel. Finally, they completed their demographic information and were thanked for their participation with a small gift.

Message structure variable: A hotel's green marketing messages were used as the topic to conduct the experimental design to manipulate the same concept in terms of promotion-focus and prevention-focus (Lin, 2011). Thus, the marketing message in terms of promotion-focus was set as "**Stay at** a green hotel, and help respect the land and cherish the environment." The marketing message in terms of the prevention-focus was set as "**Do not miss** staying in a green hotel and losing the chance to respect the land and cherish the environment together."

Regulatory focus variable: First, thirty examinees were invited to see the marketing message as designed above and were asked for their thoughts. When the thoughts were positive, such as a dream, achievement, and control of the future, these were categorized as a promoting focus. However, negative thoughts, such as miss and asking for more related messages, were categorized as preventing thoughts (Higgins, 1997; Lin, 2011). Finally, nine types of thoughts that were derived from the promotion-focus (e.g., "I feel that I have the choice to change the environment and that the decision is mine to make") and the prevention-focus (e.g., "I am not interested in knowing more about how green hotels work") were summarized as experiment questionnaire items in order to perform a manipulation check. During the experiment, after the examinees read each message, they were asked to answer the following: "After reading this message, to what extent would you agree with the statement that is in accordance with your thinking," where "1 = strongly disagree and 7 = strongly agree." Consequently, scores calculated with a positive and negative difference indicate the subject's promotion-focus and prevention-focus, respectively.

Behavioral intentions variable: The subjects' behavioral intentions were modified using previous research (Chang, 2016). They are "I will go to the green hotel for my next trip," "I will recommend the green

Table 1
Design of experiment 1.

	Regulatory Focus (promotion vs. prevention)
Gain-structure message regarding green marketing	Subjects of group I
Loss-structure message regarding green marketing	Subjects of Group II

Table 2
Design of experiment 2.

	Regulatory Focus (promotion vs. prevention)	
	Public-serving motivation	Self-serving motivation
Gain-structure message regarding green marketing	Subjects of group I	Subjects of group III
Loss-structure message regarding green marketing	Subjects of group II	Subjects of group IV

hotel to my family and friends," "If green hotels were available in my vacation schedule, I would have a strong desire to stay at this kind of a hotel." Subjects responded to the questions for behavioral intentions on a seven-point scale, where "1 = strongly disagree" and "7 = strongly agree."

3.2.2. Experiment 2

A 2 (regulatory focus: promotion vs. prevention) × 2 (gain-structure message regarding green marketing vs. loss-structure message regarding green marketing) × 2 (public-serving motivation vs. self-serving motivation) between-subjects design was used to test proposed Hypothesis 2, as shown in Table 2.

Procedure: Experiment 2 aimed to understand to what extent the two regulatory fit (or non-fit) conditions simultaneously combined with the two types of hotel green initiatives may have different effects on consumers' behavioral intentions. Public-serving or self-serving marketing messages were used as stimuli to explore and confirm their moderating effects on behavioral intentions. First, subjects read a hotel's green marketing message from the perspective of gain-structure or loss-structure and then answered the items regarding their regulatory focus. Second, they read a marketing message about a hotel's green initiatives from the public-serving or self-serving perspective (Gao and Mattila, 2014). Subsequently, they were asked to answer items regarding their behavioral intentions toward the green hotel. Finally, they completed their demographic information and were thanked for their participation with a small gift. Most items in the questionnaire in experiment 2 were the same as in experiment 1; the only difference between experiments 1 and 2 consisted of adding the hotel's green initiatives in experiment 2.

Public-serving variable: In this case, the marketing message is a news report about the green practices of the hotel (such as using green construction materials, energy-efficient lightbulbs, water-saving faucets, and recycled paper, not changing the linens and towels daily for guests staying multiple nights, and encouraging guests to bring their own toiletries), which was published in a well-known hotel management magazine regarding the achievements of the hotel's green program. "This hotel will invest more resources to implement green programs! The hotel's green program has helped our earth, and saves 35%–55% of energy. This green hotel has donated nearly 3 million New Taiwan Dollars to protect the environment in recent years to help carry out related activities!"

Self-serving variable: In this case, the marketing message is a news report about the green practices of the hotel (such as using green construction materials, energy-efficient lightbulbs, water-saving faucets, and recycled paper, not changing the linens and towels daily for guests staying multiple nights, and encouraging guests to bring their own toiletries), which was published in a well-known hotel management magazine regarding the achievements of the hotel's green

Table 3
Design of experiment 3.

	Regulatory Focus (promotion vs. prevention)	
	Cash discount incentives	Environmental protection alternatives
Gain-structure message regarding green marketing	Subjects of group I	Subjects of group III
Loss-structure message regarding green marketing	Subjects of group II	Subjects of group IV

program. "This green hotel will invest more resources to implement green programs! The implementation of the green programs will not only stimulate consumption, but also save 35%–55% of energy, and this kind of benefit is equivalent to increasing the daily average price of 300–500 New Taiwan Dollars!"

3.2.3. Experiment 3

A 2 (regulatory focus: promotion vs. prevention) × 2 (gain-structure message regarding green marketing vs. loss-structure message regarding green marketing) × 2 (cash discount incentives vs. environmental protection alternatives) between-subjects design was used to test proposed Hypotheses 3 and 4, as shown in Table 3.

Procedure: Experiment 3 aimed to compare to what extent the two regulatory fit conditions (i.e., promotion fit versus prevention fit) separately combined with the two different types of hotel incentive mechanisms may engender different effects on consumers' behavioral intentions. Marketing messages regarding cash discount incentives and environmental protection alternatives were the stimuli used to explore and confirm their moderating effects on behavioral intentions. First, subjects read a hotel's green marketing message from the perspective of gain-structure or loss-structure and then answered the items regarding their regulatory focus. Second, they read marketing messages about the hotel's green marketing incentive mechanisms (Huang et al., 2014) and then responded to questions regarding the incentive mechanisms. The responses to questions included: "I think Hotel ABC encourages me to participate in a green program by using a cash discount (used for the first version)/environmental protection program (used for the second version) and really meets my expectations" and "I think Hotel ABC encourages me to participate in a green program by using cash discount (used for the first version)/environmental protection program (used for the second version) and really gets my approval," on a seven-point scale, where 1 indicates "strongly disagree" and 7 indicates "strongly agree."

Subsequently, participants were asked questions about their behavioral intentions toward the green hotel. Finally, they completed their demographic information and were thanked for their participation with a small gift. Most items in the questionnaire in experiment 3 were the same as in experiment 1; the only difference between experiments 1 and 3 was the addition of the hotel's incentive mechanisms in experiment 3.

Incentive mechanisms variable: This research includes two types of incentive mechanisms: *cash discount incentives* and *environmental protection alternatives*. The environmental protection alternative program means that the hotel agrees to provide the guest with an offer to wash a piece of clothing (such as a shirt or a pair of pants) in exchange for the guest being willing to cooperate in doing something to assist environmental protection. The marketing message is: "*Guests need only indicate that they will bring their own toiletries or that they do not need their linens changed daily during multiple-night stays while making reservations, and the hotel will donate the* funds *saved by the guest's cooperation to promote environmental protection and provide a receipt. Details regarding the content of the promotions can be obtained from the hotel's front counter staff.*" However, cash discount incentives indicate that the hotel agrees to provide the guest with a discount for continued patronage (a discount of 1%–5%). The marketing message is: "*Guests need only indicate that*

they will bring their own toiletries or that they do not need their linens changed daily during multiple-night stays while making reservations to receive discounts between NTD 100 and NTD 300 on both weekend and weekday nights. Details regarding the discounts can be obtained from the hotel's front counter staff.*"

In order to avoid CMV, as suggested by Huang et al. (2014), methods such as designed reverse items were utilized in the study.

4. Results

4.1. Experiment 1

4.1.1. Manipulation check

Thirty individuals were invited to join the experiment, and the results of the paired sample *t*-test showed that the subjects who read the gain-structure message (M = 5.341) in terms of promotion focus indicated higher benefits for green hotels than those subjects who read the loss-structure message (M = 4.774) in terms of prevention focus. Additionally, subjects who read the loss-structure message (M = 5.641; t = 4.563, p < 0.001) in terms of prevention focus reported higher avoidance of the negative effects of green hotels than those subjects who read the gain-structure message (M = 4.726; t = 6.478, p < 0.001) in terms of promotion focus.

4.1.2. The effect of regulatory focus and messages on behavioral intentions toward green hotels

Hypothesis 1 was examined by using 140 valid responses that were obtained from two treatment groups (including 54.3% females and 45.7% males, with 72.9% aged 18–44). Levene's test showed no significant difference between the groups' variances ($F_{(3, 136)} = 1.275$, $P = 0.286$). The result of the ANOVA F statistic indicated that there is a significant difference among the various groups ($F_{(3, 136)} = 2.897$, $p < 0.05$). As Table 4 shows, the means indicate that promotion-focus subjects express more positive behavioral intentions toward green hotels when they read gain-structure messages (M = 5.963, SD = 0.839) than when they read loss-structure messages (M = 5.767, SD = 1.226). In contrast, prevention-focus subjects evaluated green hotels more positively and had more behavioral intentions toward green hotels when they read the loss-structure messages (M = 5.764, SD = 1.014) than when they read the gain-structure messages (M = 5.294, SD = 0.944). Thus, hypothesis 1 was confirmed.

4.2. Experiment 2

4.2.1. Manipulation check

Thirty individuals were invited to join the experiment to investigate the extent to which the green initiatives were perceived as having public-serving or self-serving motives (Please determine your perception of the motives for Hotel ABC's implementation of the green program, 1 = self-interested/7 = environment interested; 1 = profit motivated/7 = socially motivated).

The results of the paired sample *t*-test showed that subjects who

Table 4
BI to green hotel by examined regulatory focus with marketing messages.

Messages	Regulatory focus	
	Promotion focus	Prevention focus
	$M_{BI\ to\ green\ hotel}$ SD	$M_{BI\ to\ green\ hotel}$ SD
Gain-structure message	5.963 0.839 vs.	5.294 0.944 vs.
Loss-structure message	5.766 1.226	5.764 1.014

Note: M = mean value of BI to green hotel. SD = standard deviation. BI = behavioral intention.

read the perceived public-serving motive message (M = 5.60) indicated a significantly stronger approval of green hotels than those subjects who read the perceived self-serving motive related message (M = 4.770; t = 2.261, p < 0.05). Additionally, subjects who were exposed to the perceived self-serving motive message (M = 5.970) indicated a significantly higher agreement than those subjects exposed to the perceived public-serving motive-related message (M = 4.930; t = 2.818, p < 0.01).

4.2.2. Testing for the moderating effect of perceived public-serving or self-serving motive

To test hypothesis 2, a total of 184 valid responses were obtained from two treatment groups (including 61.4% females and 38.6% males, with 66.8% aged 18–44). Experiment 2 adds perceived public-serving or self-serving motive as the moderating variable, to test to what extent the two regulatory fit (or non-fit) conditions simultaneously combined with the two types of hotel's green initiatives may have different effects on consumers' behavioral intentions.

Levene's test indicated that no significant difference between the groups' variances ($F_{(3, 180)}$ = 1.855, P = 0.139). The result of the ANOVA F statistic indicates that there is a significant difference among the various groups (F(3, 180) = 5.404, p < 0.01). As Table 5 shows the means indicates that subjects with a promotion-focus and presented with gain-structure messages when they perceived public-serving motive toward the green hotel had significant greater behavioral intentions (M = 6.089, SD = 0.575, p < 0.05) than when they perceived self-serving motive toward the green hotel (M = 5.754, SD = 0.781). Besides, subjects with a prevention-focus and presented with loss-structure messages evaluated green hotels more positively when they perceived public-serving motive toward the green hotel had significant greater behavioral intentions (M = 6.270, SD = 0.526, p < 0.05) than when they perceived self-serving motive toward the green hotel (M = 5.813, SD = 0.782). Thus, these results confirm hypothesis 2.

4.3. Experiment 3

4.3.1. Manipulation check

Thirty individuals were invited to join the experiment to indicate whether the incentive mechanisms were perceived as environmental protective alternatives or as cash discount incentives (Please determine your perception of the incentive mechanisms behind Hotel ABC's encouraging consumers to participate in green programs, *1 = cash discount incentives/7 = environmental protection alternatives; 1 = seems to feedback to individual/7 = seems to feedback to the environment*).

The results of the paired sample t-test showed that subjects who read the environmental protective alternatives message (M = 5.800) showed a significantly stronger approval of green hotels than those subjects who read the cash discount incentives message (M = 4.070; t = 5.454, p < 0.001). Additionally, subjects who read the cash

Table 5
BI to green hotel by examining regulatory focus with marketing message and perceived public-serving or self-serving motive.

Perceived motivation	Regulatory focus		
	Promotion focus	Messages	Prevention focus
	Gain-structure message		Loss-structure message
	$M_{BI\ to\ green\ hotel}$ SD		$M_{BI\ to\ green\ hotel}$ SD
Public-serving motivation	6.089 0.575		6.270 0.526
	vs.		vs.
Self-serving motivation	5.754 0.781		5.813 0.782

Note: M = mean value of BI to green hotel. SD = standard deviation. BI = behavioral intentions.

Table 6
BI to green hotel by examining regulatory focus with marketing message and cash discount incentives.

Effects	Dependent variable	F-value	P
Main effect			
Regulatory fit (promotion/prevention)	Behavioral intention	0.459	0.500
Cash discount perception (high/low)	Behavioral intention	0.238	0.627
2 × 2 two-factor interaction			
Regulatory focus x Cash discount perception	Behavioral intention	5.415	0.022

discount incentives message (M = 5.730) showed significantly higher agreement than those subjects who read the environmental protective alternatives message (M = 4.900; t = 2.589, p < 0.05).

4.3.2. The moderating effect of perceived incentive mechanisms

To test our hypotheses 3 and 4, a total of 191 valid responses were obtained from two treatment groups (including 57% females and 43% males, with 87.5% aged 18–50). Experiment 3 adds perceived incentive mechanisms as the moderating variable, to test to what extent the two regulatory fit conditions (i.e., promotion fit versus prevention fit) separately combined with the two different types of a hotel's incentive mechanisms may engender different effects on consumers' behavioral intentions.

Among the 191 valid responses, the useable responses (n = 97) were used to test hypothesis 3. Levene's test indicated that there was no difference between the groups' variances ($F_{(3, 93)}$ = 0.061, P = 0.980). The results of the two-way ANOVA showed that the interaction effect between the regulatory fit and cash discount incentives on behavioral intentions is significant (F(1,96) = 5.415, p < 0.05) (as Table 6 shows). Thus, in the condition of prevention fit, the effect of high cash discount incentives on behavioral intentions (M = 5.051) is significantly greater than the low cash discount incentives does (M = 4.597; F(1,65) = 5.461, p < 0.05) (as Table 7 shows). Accordingly, as showed in Fig. 2, these results confirm hypothesis 3 which means prevention fit consumers perceived higher cash discount incentives performed greater behavioral intentions to green hotels than perceived lower cash discount incentives does.

In addition, the useable responses (n = 94) were used to test the hypothesis 3. Levene's test found that no significant difference between the groups' variances ($F_{(3, 93)}$ = 1.108, P = 0.350). The results of two-way ANOVA showed that the interaction effect between regulatory fit interact with environmental protection alternatives on behavioral intentions is significant (F(1,93) = 1.357, p < 0.05) (as Table 8 shows). Thus, in the condition of promotion fit, the effect of high environmental protection alternatives on behavioral intentions (M = 5.770) is significantly greater than the low environmental protection alternatives does (M = 5.111; F(1,28) = 4.558, p < 0.05) (as Table 9 shows). Accordingly, as showed in Fig. 3, these results confirm hypothesis 5 which means promotion fit consumers perceived higher environmental protection alternatives performed greater behavioral intentions to green hotels than perceived lower environmental protection alternatives does.

Table 7
Simple main effect.

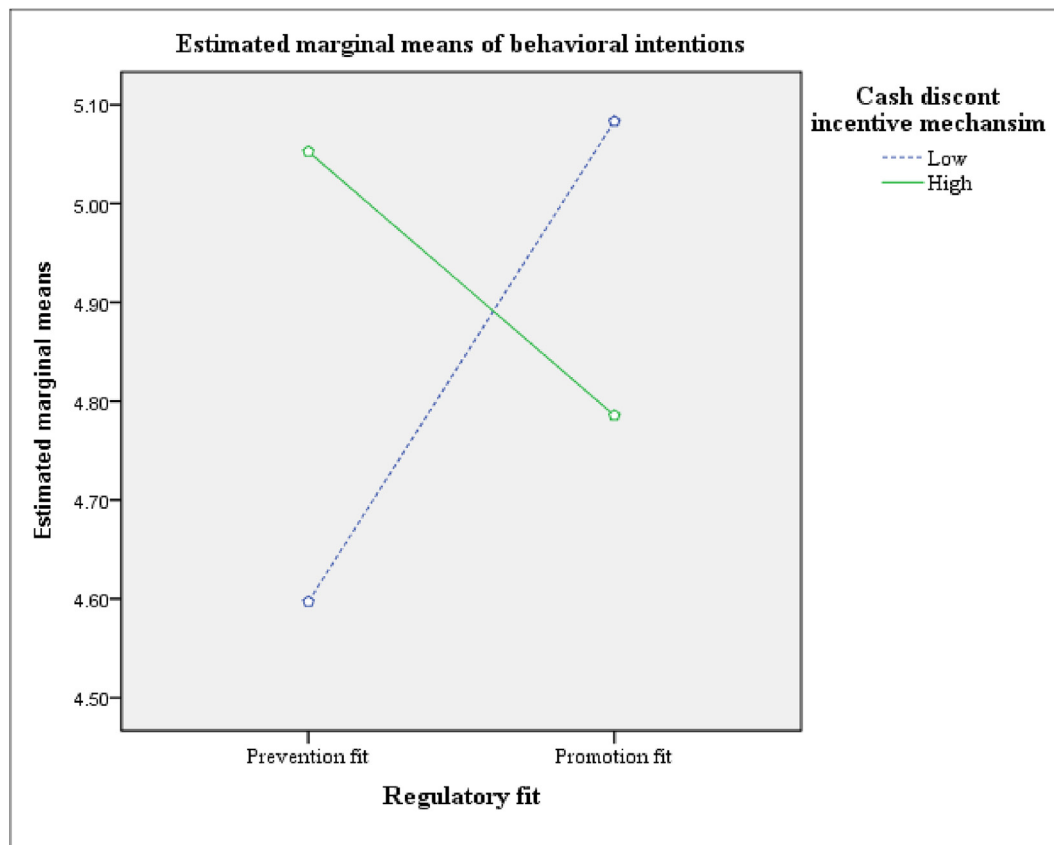| Regulatory fit	F-value	P	Cash discount perception	M
Regulatory fit (promotion)	1.386	0.249	High	4.786
			Low	5.083
Regulatory fit (prevention)	5.461*	0.023	High	5.051
			Low	4.597

Note: **, P < 0.05.

Fig. 2. The interaction effect of regulatory fit and cash discount incentives on behavioral intentions.

Table 8
BI to green hotel: a function of regulatory fit and environmental protection alternatives.

Effects	Dependent variable	F-value	P
Main effect			
Regulatory fit (promotion/prevention)	Behavioral intention	0.866	0.355
Environment perception (high/low)	Behavioral intention	1.357	0.247
2 × 2 two-factor interaction			
Regulatory focus x Environment perception	Behavioral intention	5.906	0.017

Table 9
Simple main effect.

Regulatory fit	F-value	P	Environment perception	M
Regulatory fit (promotion)	4.558*	0.042	High	5.777
			Low	5.111
Regulatory fit (prevention)	1.135	0.291	High	5.154
			Low	5.385

Note: **, $P < 0.05$.

5. Conclusions

Although various studies (e.g., Han and Kim, 2010; Huang et al., 2014; Wang, Wang, Xue, Wang and Li, 2018; Yadav et al., 2019) have made efforts to explore green hotel choice behavior, little research has investigated green hotel choice behaviors in terms of the regulatory fit effect. Specifically, this study integrates three variables (i.e., marketing message, consumers' perceived motives of green initiatives (CPMGI), and consumers' perceived incentive mechanisms (CPIM)) to explore

their effects, as well as the interaction effects on consumers' behavioral intentions toward green hotels when implementing green marketing practices. The research findings can help businesses develop a further practical understanding of how to use green marketing messages to attract and persuade consumers and thus to intensify their behavioral intentions toward the firms while filling the academic research gap on hotel green marketing issues.

5.1. Theoretical implications

First, one of the important contributions of this study is the application of the concept of regulatory focus theory (promotion focus vs. prevention focus) to message construction (gain-structure messages vs. loss-structure messages) to understand how their integration might have different effects on consumers' brand attitudes and choice behavior. That is, when the marketing messages are the same as people's current targets, the messages' persuasive effects will be enhanced. As showed in Table 4, hypothesis 1 is supported: conditions where a promotion focus is combined with a gain-structure message and prevention focus is combined with a loss-structure message have greater effects on behavioral intentions than do non-fit conditions. Therefore, green hotel marketers should frequently design different green marketing messages to deliver messages in accordance with consumers' desires and thus facilitate consumers' brand choices and purchase intentions toward a business (Ruiz and Sicilia, 2004). In particular, consumers with different regulatory foci choose and trust information to achieve their goals (Hsu and Chen, 2014). Therefore, using marketing messages to change the business image for consumers could raise the green market share of a business (Nyborg et al., 2006). For example, when consumers look for hotels, the marketing message can highlight the connection between a topic and its consequence (e.g., "*Stay at a green hotel, and help respect the land and cherish the environment because you have the choice to*
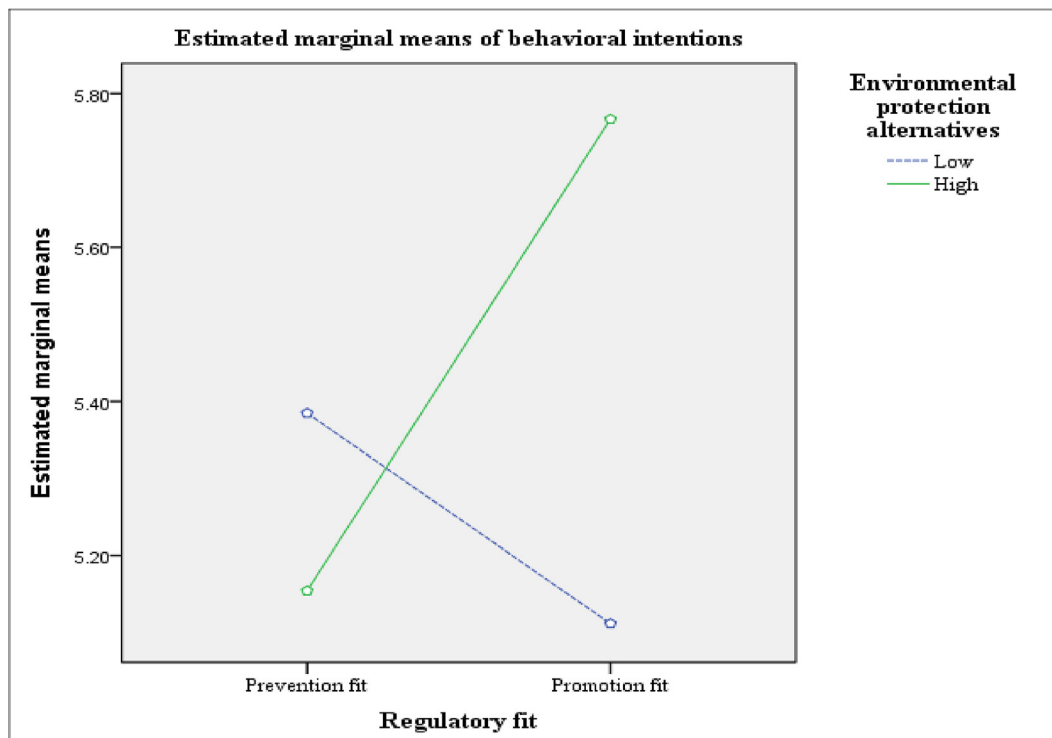
Fig. 3. The interaction effect of regulatory fit and environmental protection alternatives on behavioral intentions.

change the environment and that decision is yours to make") for the promotion-focused consumers. On the other hand, for the prevention-focused consumers, the marketing message can be presented as: "*Do not miss staying in a green hotel and losing the chance to respect the land and cherish the environment together because there is only one Earth, so we must cherish it.*"

In addition, another contribution of this study is the exploration of the moderating variables that affect the relationship between the consumers' regulatory fit and behavioral intentions. Therefore, the present study investigates consumers' from two perspectives: one is to explore the effect of consumers' perceptions of the hotels' implementation of green marketing motives on their behavioral intentions, and another is to investigate the effect of consumers' perceptions of the incentive motives of hotels' green marketing on their behavioral intentions.

5.2. Managerial implications

Previous marketing research has confirmed that consumers with different regulatory foci would show different attitudes and behaviors when exposed to a marketing message (e.g., Chang and Chou, 2008; Hsu et al., 2017; Lin, 2011; Zhang et al., 2018). Gao and Mattila's (2014) research has found that hotels should be designed with a set of countermeasures to account for CSR, thus enhancing their competitive ability. They concluded that consumer satisfaction with green hotels is enhanced when a firm engages in green initiatives for public-serving (vs. self-serving) reasons. As shown in Table 5, the present study further confirms that both regulatory fit consumers who are exposed to public-serving messages of the green hotels' implementation of green marketing motives show significantly greater behavioral intentions than they do when they are exposed to self-serving messages of the green hotels' implementation of green marketing motives. Nelling and Webb (2009) showed that businesses engaged in social welfare activities improve their business image among consumers and that they engender more positive attitudes toward good-image businesses and purchasing of their products or services (Huang et al., 2015). Therefore, managers must pay attention to effectively managing and responding to messages

posted in the media. For example, marketing the benefits of the hotel's green measures in well-known commercial magazines or other media that are popular with general investors may earn the recognition of such consumers. However, when marketing the results of the green activities implemented by the hotel to general consumers, the consumers must be able to feel the public-serving motives behind the hotel's green activities, so as to have a greater impact on their behavioral intentions. It is important to note that consumers will be affected by the public-serving motives of the green hotels that they are exposed to regardless of their regulatory fit.

Furthermore, as for testing hypothesis 3, this study proposed that in cases of offering cash discount incentives, consumers with a prevention regulatory fit show greater behavioral intentions toward green hotels than consumers with a promotion regulatory fit. Although extrinsic cash interventions may lower the level of intrinsic motivation in terms of MCE, Lin's (2012) study has found that although environmental awareness exerted a positive influence on green consumption behavior, the cash discount incentives were not enough to get the hotel guests to reuse their linens. In contrast, donations to promoting environmental protection alternatives induced guests staying multiple nights to continue participating in environmental protection. However, as shown in Table 7 and Fig. 2, the results of the study further showed that in the condition of a prevention fit, the effect of high cash discount incentives on behavioral intentions is significantly greater than low cash discount incentives. In other words, for prevention-fit consumers, the more that cash discount incentives are implemented by a hotel, the more the green marketing effect facilitates their behavioral intentions.

In addition, as shown in Table 9 and Fig. 3, the results of the study showed that in the condition of a promotion fit, the effect of high environmental protection alternatives on behavioral intentions is significantly greater than those of low environmental protection alternatives. As found by Huang et al. (2014), female and young hotel consumers are more apt to accept environmental protection, and the present study further suggests that as for promotion-fit consumers, the more the environmental protection alternatives implemented by a hotel, the more the green marketing effect facilitates their behavioral

intentions.

Furthermore, demographic characteristics are frequently used to understand green consumption behavior because consumer psychological factors regarding environmental protection issues are gradually affecting consumer behavior (Huang et al., 2014; Laroche et al., 2001). Therefore, a concern with the environment may generate conscious consumption and exert a positive influence on green consumption behavior. Hotel managers should focus on these consumer groups, segment the market, and formulate green marketing strategies accordingly. For example, Cvelbar et al. (2017) investigated hotels in Slovenia and showed that key personnel and travel characteristics of hotel guests are predictive of towel reuse and suggest performing a market segmentation of customers who could be given a booking preference in periods of high demand to reduce the hotel's environmental footprint.

5.3. Limitations and further research directions

Some limitations are discussed to orient further research. First, future research with samples from other countries is suggested to obtain sufficient external validity and generalizability of the experimental findings. In addition, this study uses the hotel industry as the research target to explore the effects of cash discount incentives and environmental protection alternatives on green consumer behaviors. However, other incentive mechanisms, such as discounts for living in hotels, providing dining coupons, discounts on product suite courses, and discounts on tourist attractions, should be considered in future research to compare their effects on consumer behavioral intentions to clarify the MCE among these incentive mechanisms. Hotel marketers can establish more effective incentive mechanisms to attract their target consumers. Finally, the present study conducted experiments in terms of CPMGI and CPIM separately, and future studies could explore their interaction effects and examine their effects on consumers' behavioral intentions toward green business.

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