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Collectivism or individualism: the challenge to predict green hotel selection in a developing country

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Collectivism or individualism: The challenge to predict green hotel selection in a developing country

Abstract

The impact of individualism or egoism on consumers' pro-environmental behaviour always yields conflicting outcomes in Eastern and Western societies. Meanwhile, prior research largely relied on a single attitudinal dimension to explain how consumers preferred green hotels. This study incorporates two types of attitudes, ecocentric and anthropocentric, to examine whether collectivism or individualism is more appropriate for understanding why consumers in Eastern societies choose green hotels. 296 usable questionnaires were collected in three cities using an online survey with purposive sampling and processed using structural equation modelling. Results revealed that collectivism positively influenced anthropocentric attitude, intention, and willingness to pay more. Individualism negatively influenced ecocentric and anthropocentric attitudes but positively influenced intention and willingness to pay more. Ecocentric and anthropocentric attitudes positively influenced intention and willingness to pay more. Furthermore, ecocentric attitude positively influenced anthropocentric attitude towards green hotel selection. Theoretical and practical implications as well as limitations were discussed accordingly.

Keywords: Anthropocentric attitude; collectivism; ecocentric attitude; green hotel visitation; individualism

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1. Introduction

The economy and per capita income are projected to benefit from economic expansion (Kumar & Sreen, 2020). Massive environmental degradation has been caused by rapid technological innovations, materialistic consumption patterns, the depletion of natural resources, and population increase (Kautish & Sharma, 2019), caused mainly by consumer-generated activities (Shah et al., 2023). Changes in consumer behaviour are essential to sustainability (Wang et al., 2021). The products and services of enterprises that have thus decided to integrate green practices into their value and operations are now being positively received by the public (Sultana et al., 2022) for acquiring a better chance of surviving the highly competitive marketplace (Niloy et al., 2023).

The hospitality industry is a major contributor to environmental problems, with almost 75% of the adverse environmental effects that hotels create (Sadiq et al., 2022). To protect our only planet, green hotels are characterised as "seeking out and researching ideas and techniques that hoteliers can use to conserve water and energy and reduce solid waste" (Green Hotel Association, 2026). Prior research demonstrated that green hotel practices increase hotel revenues as two-thirds of travellers search for green hotels when they travel (Zaidi et al., 2019), and 40% of travellers prefer to pay an additional 4-6% for green lodgings (Wang et al., 2022b) and reduce costs through waste reduction and recycling policies (Ray et al., 2024). Thus, an overarching strategy for green hotels was to better arouse customers about environmental issues, concentrate on providing pro-environmental products and services that use less energy and emit less pollution (Cheng et al., 2022), and enable products to be more affordable and offer more financial incentives because such implementations can stimulate their social, reputational, and status-orientated perspectives (Zaidi et al., 2019).

Although many green hotels have expanded, booking revenues have not improved considerably (D'Souza et al., 2020). Scholars recognised this inconsistency, which amply demonstrated a discrepancy between the environmental attitude and the intention or actual behaviour, which refers to the attitude-intention/behaviour gap (Wang et al., 2024b; Wang et al., 2022b). Green hotel practices are still in their infancy and are unpredictable because guests' actual visit behaviours are still one aspect that is lacking (Ansari et al., 2022). Hence, researchers have resorted to value-based theories like value-attitude-behaviour and value-belief-norm theory (Wang et al., 2023a; Wang et al., 2020a) and behavioural theories like the theory of reasoned action and theory of planned behaviour (Wang et al., 2024c; Wang et al., 2023b) to better understand the behaviours of green hotel guests. Nonetheless, the results of these studies are often complex and sometimes incompatible (Wang et al., 2024b).

Altruistic, biospheric, and egoistic values are the three categories of personal values that the value-belief-norm theory found to be most strongly associated with pro-environmental behaviour (Stern, 2000). People are more likely to act in a pro-environmental manner if they

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adhere to self-transcendent values (i.e., altruistic or biospheric values) as opposed to self-enhancement (i.e., egoistic value) (Wang et al., 2023a). However, "the three value orientation we identify are the most frequently noted in the Western literature on environmental concern, but they are not the only ones that might be relevant" (p. 326) (Stern et al., 1993). For example, scholars criticised applying egoistic value for consumers who reside in Eastern countries because the highly collectivistic values practised in these societies, when compared to most Western countries, which emphasise individualistic values (Gong et al., 2024; Wang et al., 2024d).

The two ends of the perceived cultural value of society, collectivism and individualism, can influence consumer environmental behaviour at the national level (Kumar & Sreen, 2020). The country's collectivistic culture, where consumers' expectations, sanctions, and obligations to purchase pro-environmental products are anchored more in adherence to the norms of their social groups than in their own moral commitments, encourages people to be more likely to buy pro-environmental products and services (Yeow & Loo, 2022). Individualistic values, on the other hand, are characterised by a high degree of competition, independence, self-reliance, and freedom of choice (Wang et al., 2020a). Consequently, people with a strong competitive and selfish orientation are less likely to engage in pro-environmental behaviour than people whose needs have been met, who are subsequently more likely to do so because they require more resources to accomplish their goals (Kaufmann et al., 2012; Wang et al., 2024d). Limited empirical studies on green hotels have shown that attitudes and behaviours during green hotel visits are positively correlated with collectivistic values, in contrast to individualistic values (Wang et al., 2022a; Zhang et al., 2025). However, there is a lack of sufficient studies that investigate how individualism and collectivism influence consumers' green hotel visits at the individual level (Kumar & Sreen, 2020; Wang et al., 2021).

Meanwhile, the prevalent studies did not consider the role of different aspects of attitude in explaining consumer green hotel visits (Wang et al., 2024c). Attitude refers to people who adopt a positive overall evaluation of green hotel qualities, which are more likely to visit that within the theory of planned behaviour, which refers to anthropocentric attitude (Wang et al., 2024c). Nevertheless, a person's emotional connection to or love of nature may also be a requirement for their actions when they are at green hotels (Wang et al., 2023a). In the value-belief-norm theory, the new environmental paradigm reflects an individual's ecological worldview toward protecting natural resources and the environment, which refers to ecocentric attitude (Wang et al., 2024b). Hereof, comparatively, the theory of planned behaviour lacks research on theories that explore environmental attitude at the macro level (Rahman & Reynolds, 2019), and vice versa for the value-belief-norm theory (Wang et al., 2024c). Recently, researchers suggested that it is inappropriate to use both aspects of attitudes interchangeably to explain consumer green hotel visits in green marketing (Wang et al., 2024b; Wang et al., 2024c).

Furthermore, because the concept of green hotels has been extensively explored from the Western perspective (Wang et al., 2022b), investigations regarding consumers' green hotel visits were well handled in Western countries and minor Asian developed countries or regions like Taiwan, Hong Kong, and the Republic of Korea (Fauzi et al., 2024; Ray et al., 2024). In developing countries such as China, India, Oman, and Malaysia (Ahn & Kwon, 2020; Ansari et al., 2022; Haq et al., 2023; Sultana et al., 2022; Wang et al., 2024d), the majority of travellers are only heard about the concept of green hotels, they lack familiarity with the benefits and

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operational framework of these establishments, and are uncertain about the offerings of green hotels (Arun et al., 2021; Fauzi et al., 2024). Despite prior research that has identified value-related factors influencing travellers' intentions to visit green hotels in certain developing countries, there is currently a dearth of literature reviews and a synchronised empirical approach in these nations, rendering research on consumers' green hotel visitations in the early stages (Sultana et al., 2022; Wang, 2022).

In China, the tourism and hospitality sectors constituted approximately 3.96% of GDP in 2021 (Zhang et al., 2025), and the prevalence of green hotels has markedly increased (Wang, 2022). Meanwhile, there is a growing demand for green consumerism because people grow more concerned about their health and the environment (Hong et al., 2024). For example, about 80% of Chinese tourists favour sustainable tourism, and about 89% of them expressed that they would select at least one green hotel during their trip (Pan et al., 2022). Nevertheless, various industry research reports and empirical studies indicate that Chinese consumers exhibit limited concern regarding visits to green hotels (Zhang et al., 2025). One important reason is that although China has more than 700 green hotels, and the number is growing promptly (Jiang & Gao, 2019), this number is far less than that of developed countries, for example, there were more than 11,000 hotels reported as green lodging/hotels in 2024 (Greenview, 2025). Chinese hotel guests' awareness and understanding of green hotels are still in their preliminary stage (Wang et al., 2024c). This suggests that, in comparison to Western nations, there is a paucity of findings on green hotel visits in China, leading to an inadequate theoretical framework (Wang et al., 2024e).

Therefore, the current study seeks to address the research gap by determining visit intention and the willingness to pay a premium for green hotels by evaluating the psychological components of the theory of planned behaviour and value-belief-norm theory (See **Figure 1**). Accordingly, the purpose of this study is: 1) to investigate the influence of collectivism and individualism on anthropocentric attitude, ecocentric attitude, willingness to pay more, and intention to visit; and 2) to investigate the influence of anthropocentric attitude and ecocentric attitude on willingness to pay more and intention to visit green hotels, especially in a highly collectivistic value country.

2. Literature review

2.1 The value-belief-norm theory

Research on fundamental human values offers valuable insights into what people care about (Bouman & Steg, 2019) because values serve as universal, broad, and desirable goals to strive for in life and guide people's views and behaviours (Bardi & Schwartz, 2003; Schwartz, 1996). Value is comparatively constant over time (Jacobs et al., 2018), transcends specific situations, and functions as a standard or criterion by which things, actions, technologies, and policies are judged to be good, valuable, useful, desirable, or beneficial (Al-Swidi & Saleh, 2021) and one by which people determine whether or not to support particular actions (Bouman & Steg, 2020).

Research has revealed a variety of personal values that are recognised by people, including consumption-related values (Rasoolimanesh et al., 2020) and pro-environmental values (Stern et al., 1999). Although everyone supports all values to a particular degree, the degree to

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which each value is prioritised and supported differs depending on its significance and function as a guide in life (Tamar et al., 2021). An individual may strongly support particular values and offer them precedence over other values, and vice versa (Maio et al., 2009). Similarly, every person has a different set of values that are arranged in a hierarchical structure (Bouman & Steg, 2020). Accordingly, prioritising values is likely to have greater influence on a person's beliefs and actions than less strongly supported values (van den Broek et al., 2017).

The value-belief-norm theory of environmentalism is recognised as the leading value-driven theory for understanding consumers' green purchase behaviours, including the green lodging context (Carvajal-Trujillo et al., 2024). The value-belief-norm theory of environmentalism (Stern, 2000) is an extension of the moral norm-activation theory of altruism (Schwartz, 1977) because this extended theory overcomes the moral norm-activation theory of altruism, which ignores non-activist pro-environmental behaviour in green marketing, such as petitioning about environmental issues, joining environmental organisations and willingness to pay higher taxes for environmental products, which indirectly influence the public's environmental awareness (Wang et al., 2020a). Therefore, according to the value-belief-norm theory, a variety of environmental values play a crucial role in influencing people's beliefs, which in turn influence personal norms that lead to pro-environmental behaviour, whether it be in the form of activism, non-activism, private sector behaviour, or other environmentally significant behaviours (Wang et al., 2024b). The value-belief-norm theory has been applied by numerous studies to explain why consumers choose green hotels (Fauzi et al., 2024; Sadiq et al., 2022).

2.1.1 Egoistic value vs. altruistic value and biospheric value

According to the value-belief-norm theory, three typical sub-values appear to be especially related to green marketing (Schwartz & Bardi, 2001). Two of these values are belonging to self-transcendence cluster (Stern, 2000), demonstrating that the objectives linked to these values serve interests greater than oneself, specifically nature and the environment, others, and society in general, and thus transcend the self (Bouman & Steg, 2019); the third value is belonging to self-enhancement cluster (Stern, 2000), its objectives largely serve the interests of individual's personally, such as their welfare and well-being (Bouman & Steg, 2020).

Accordingly, two values that are part of the self-transcendence are altruistic and biospheric. Altruistic value refers to the desire to contribute to others and society rather than one's own interests (Bautista Jr et al., 2020). If they have a strong belief in altruistic values, they are prone to act in ways that improve the environment since green purchasing behaviours benefit society and future generations (Bouman & Steg, 2020). Biospheric value indicates goals to care for nature and the environment (Gong et al., 2024); the more strongly someone endorses biospheric values, the more engaged in pro-environmental behaviours (Bouman & Steg, 2019). In sum, self-transcendence (i.e., altruistic and biospheric values) focuses on how to be socially related to others and the environment, and positively affect them (Hajiheydari & Delgosha, 2023). Given that pro-environmental behaviours are beneficial for the environment and nature, and for society and other people, it is reasonable that both values would typically support such activity (Bouman & Steg, 2019).

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Egoistic value, which is part of the self-enhancement cluster, is generally negatively related to environmentally friendly behaviour (Wang et al., 2020a). Because pro-environmental behaviours are usually linked to self-interest considerations (e.g., financial costs, inconvenience), people who strongly believe in egoistic values are extremely concerned with accomplishment, power, and prestige (Bouman & Steg, 2020). Extremely competitive and self-centred people are less likely to perform pro-environmental behaviour, or they may have met their own needs, and are more likely to be environmentalists because they use more natural resources and are therefore more concerned with greater social and environmental consequences (Wang et al., 2023a). For example, status-enhancing sustainable technology (e.g., electric vehicles) is more likely to be adopted by those with a greater egoistic value orientation (Bouman & Steg, 2020) because of the attributes of value for money, reducing household expenditures, and others (Wang et al., 2022d). Self-enhancement is therefore linked to personal interests and developments (Schwartz, 2012), and researchers generally assert that the more strongly individuals adhere to altruistic and biospheric values beyond their egoistic values, the more likely they are to engage in pro-social and pro-environmental behaviours (Hajiheydari & Delgosha, 2023; Rahman & Reynolds, 2019).

Many individual activities have both costs/self-interests and benefits for various types of values. For example, promoting biospheric benefits was found to be more successful than promoting financial benefits to encourage participation in specific pro-environmental behaviours (e.g., energy-saving initiatives) (Schwartz et al., 2015). Environmental benefits by themselves might not be persuasive enough to someone with a strong self-enhancement orientation, particularly if the activities are inconvenient or the prices are unaffordable (Bouman & Steg, 2020). Thus, people may experience value conflict when they believe that engaging in pro-environmental activities has benefits and costs/self-interests for the same or distinct kinds of values (Bouman & Steg, 2020; de Groot & Steg, 2007b; Steg, 2016). In these situations, the perceived relative positive or negative effects on each value, particularly those on strongly supported values, have an impact on an individual's opinions regarding whether or not to take action (Ponizovskiy et al., 2019). Therefore, it is essential to determine the elements of personal values – such as altruistic, biospheric, and egoistic values that encourage, support, and hinder an individual's pro-environmental behaviours.

The mainstream of previous studies used self-transcendence, whether altruism, biospheric or combined, in explaining consumer green hotel visits, which display a positive correlation between them in both Eastern and Western countries. For example, D'Souza et al. (2020) reported that biospheric value positively influences travellers' intentions to stay in green hotels in Australia, while Eid et al. (2021) found that altruism and biospheric value positively influence guests' intention to visit green hotels in Egypt.

In contrast, there is an inconsistent predictive capacity of egoistic value on consumer green hotel visits. For instance, Sadiq et al. (2022) demonstrated that egoistic value positively influences consumer eco-friendly behaviour towards visiting green hotels in India, while Eid et al. (2021) reported that the sense of being obligated to visit green hotels is negatively influenced by egoistic value in Egypt. The possible reason that those value orientations were identified is that they are the most frequently noted in the Western literature on environmental concerns, but they are not the only ones that might be relevant (Stern et al., 1993). Therefore, egoistic value may be an important basis for the principled opposition of some individuals towards the

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objectives of environmental movements, but the precise ways in which egoistic values affect behaviour are not well understood (Wang et al., 2020a).

2.1.2 Collectivistic value vs. egoistic value and individualistic value

The social adaptation theory indicates that value is a type of social cognition that assists people in adjusting to their surroundings (Kahle, 1983). Values and attitudes are adaptive constructs that continuously emerge from the adaptation, integration, organisation, and synthesis of environmental information (Homer & Kahle, 1988). Values are the most abstract of the social cognitions; they reflect the most fundamental characteristics of adaptation (Rahman & Reynolds, 2019). These abstracts serve as archetypes that serve as the foundation for attitudes and behaviours (Homer & Kahle, 1988). Because cultural value is a collective cognitive programming that sets one group apart from another (Hofstede, 1984, 2001), it is ingrained in every individual, creating a distinctive style of thought and behaviour (Cho et al., 2013). Hence, cultural value can be described as the long-standing personal beliefs and values that create reliable guidelines for people's roles and interactions within a particular culture (Chan, 2001; Yigitcanlar et al., 2023).

In green marketing, egoistic value is generally related to individualism (Wang et al., 2020a), which refers to the moral stance, political philosophy, ideology or social outlook that stresses the moral worth of the individual (Gagnier, 2010). Because individualism is characterised by independence, self-reliance, freedom of choice and a high level of competition (Wang et al., 2020a), thus, individuals who have a strong selfish and competition orientation are less likely to perform pro-environmental behaviours or have satisfied their own needs, who are subsequently more likely to perform green purchase behaviour since they need to use more natural resources to achieve their goals (Kaufmann et al., 2012). However, in highly collectivistic value orientation regions and countries, collectivists prioritise group interests over individual needs and desires (Wang et al., 2020a); they will forgo their own interests in favour of the greater good of society (Sreen et al., 2018). In this circumstance, individuals with collectivistic values are more likely than people with individualistic value orientations to engage in pro-environmental behaviours such as green hotel visits (Saleem, 2021) because most green products and services (e.g., green hotels) are marketed as ones that will benefit society and the environment (Kumar & Sreen, 2020). Hereof, egoistic value and collectivistic value are two opposite values (Wang et al., 2023a).

Several cultural values have been used in cross-cultural literature (Chen, 2013; Wang et al., 2021). The individualistic-collectivistic value orientation is the most popular method for analysing variation in four different cultural value patterns: horizontal individualism, vertical individualism, horizontal collectivism, and vertical collectivism (Cho et al., 2013). Differences in values and how individuals coexist may be reflected in the individualistic-collectivistic value orientation (Cho et al., 2013). Horizontal patterns assume that one self is rather similar to all other selves, whereas vertical patterns are constructed from hierarchies and assume that one self is different from other selves (Triandis & Gelfand, 1998).

Individualism is conceptualised with personal ambitions and assumes that people are independent of one another (Kumar & Sreen, 2020). People who adhere to individualistic values

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prefer a loosely connected social system where they solely take care of themselves and their immediate families (Hofstede, 1984). Both horizontal and vertical individualism put a strong focus on individuality and independence, although they differ in other ways, such as in achieving high prestige. Compared to horizontal individualists, vertical individualists are more likely to ascend to their positions by fiercely competing with others to be the greatest (Cho et al., 2013). Besides, collectivism assumes that individuals are obligated by their group's expectations (Hofstede, 1984). People who live in communities with collectivistic cultural values anticipate that their family members or other members will follow them in exchange for their unchanging loyalty (Kumar & Sreen, 2020). Interdependence is significant to those who adhere to both horizontal and vertical collectivistic principles (Saleem, 2021). People with horizontal collectivism are more likely to prioritise their own interests (e.g., well-being) (Cho et al., 2013), while people with vertical collectivism willingly sacrifice their own requirements (e.g., sacrificing conveniences and high-quality products) (Fauzi et al., 2024) to further the objectives of a group (Triandis & Gelfand, 1998).

According to the generally accepted cultural value typology, the majority of Asian nations are linked to high collectivistic values (e.g., altruistic and biospheric values), whereas most Western nations score highly on individualistic values (e.g., egoistic value) (Sivadas et al., 2008; Wang et al., 2021). Researchers believe that people with collectivistic values are more likely to use sustainable products or services when they feel like supporting local culture and environmental causes because such actions advance the interests of the group (Ray et al., 2024). However, researchers contend that self-enhancement (e.g., egoistic value) cannot be used in certain Asian countries to identify people's pro-social and environmental behaviours because people from unique collectivistic nations have a strong propensity to conform to the values of their social groups (Gong et al., 2024; Wang et al., 2022a). This indicates that there are some disagreements on the application of cultural values orientation because of the scale's inconsistent factor loadings and reliabilities, and lack of robustness and parsimony when employing samples from different countries (Sivadas et al., 2008; Wang et al., 2021). Therefore, studies on how individualistic and collectivistic values function as a framework for personal values that influence pro-environmental behaviour in various cultural contexts are required.

2.2 Collectivistic value

Collectivistic value refers to individuals who hold collaborative, interdependent, goal-oriented, and less competitive beliefs (Wang et al., 2024d). People in collectivistic cultures are more closely linked and belong to the same group (Hofstede, 2001). They believe that people are obligated to each other and to the group (Cho et al., 2013), which makes them less independent and typically less free to choose (Saleem, 2021). Therefore, collectivists prioritise society above oneself when attempting to preserve advantageous relationships with it (Kumar et al., 2019). They will also prioritise the community's interests ahead of their own (Sreen et al., 2018). Research has confirmed that individuals with collectivistic values (i.e., Asian countries) prioritise group interests more often than those with individualistic values (i.e., Western countries) (Sivadas et al., 2008; Wang et al., 2021). This is especially true for Confucian collectivism (e.g., China) (Chiou, 2001; Wang et al., 2020a), because those who adhere to collectivistic values believe in group norms, and the severity of the consequences of losing "face" (i.e., indignity) is determined (Chen et al., 2021), as losing face can cause embarrassment (Cho et al., 2013).

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Individuals may be inspired to engage in particular activities by collectivistic values (Saleem et al., 2018), such as pro-social behaviours (Vyas et al., 2022) and pro-environmental behaviours such as green hotel visits (Wang et al., 2024b). Collectivistic values put a strong focus on serving the interests of others. These values include understanding, respecting, and tolerating everyone, and motivating others to seek social justice and equality for all those who desire to be helpful, devoted, and honest (Roccas et al., 2010). Most pro-environmental products and services are promoted as having positive social and environmental effects. People who share this perspective are more likely to act in manners that benefit society as a whole (Kumar & Sreen, 2020) and to preserve the environment so that everyone in society, including themselves, can prosper (Chen, 2013). Thus, people are more likely to perceive a group as environmentally conscious if they believe the group cares about the environment (Wang et al., 2021). People with high collectivistic values are prepared to sacrifice their own interests in favour of a group's goals (Fauzi et al., 2024), view pro-environmental behaviours as a long-term collective concern (de Groot & Steg, 2007a), and are ready to overcome external inconveniences when using those products and services (Kumar & Sreen, 2020).

Previous studies have demonstrated that green marketing studies have long emphasised collectivistic values and pro-environmental consumption behaviours. Saleem (2021) found that travellers' attitudes towards visiting green hotels were significantly predicted by collectivistic value. Wang et al. (2024d) showed that collectivistic value had a favourable impact on ecocentric attitudes towards visiting green hotels, while Wang et al. (2023a) showed that collectivistic value was a significant predictor of both ecocentric and anthropocentric attitudes towards visiting green hotels. In addition, compared to individualists, people who value collectivism are more likely to behave in an environmentally conscious manner (McCarty & Shrum, 2001). Chen (2013) found that customers who are collectivistic and those who are individualistic differ significantly in their pro-environmental attitude and intention. Additionally, Wang et al. (2021) showed that green purchase behaviour was significantly associated with those who valued collectivism but not with individuals who valued individualism. Nevertheless, few studies reported that collectivistic value did not completely influence consumer green purchase attitude and behaviour (e.g., green car purchasing behaviour and green hotel visits) even in the highly collectivistic value orientation regions or countries (Wang et al., 2023a; Wang et al., 2022c). Therefore, we proposed:

H1a: Collectivistic value *significantly* correlated to ecocentric attitude.
H1b: Collectivistic value *significantly* correlated to anthropocentric attitude.
H1c: Collectivistic value *significantly* correlated to intention.
H1d: Collectivistic value *significantly* correlated to willingness to pay more.

2.3 Individualistic value

Individualistic value is a social standpoint, political philosophy, ideology, or ethical stance that highlights the moral significance of each individual (Gagnier, 2010). While rejecting external interference from institutions and society that interact with one's own interests, it encourages the execution of one's seek and desires, valuing independence and self-reliance (Chen, 2013). Individualists maximise their own achievements based on their own interests (Wang et al.,

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2023a), and they are distinguished by freedom of choice, independence, self-reliance, and a high degree of competitiveness (Wang et al., 2024b). Individualists often favour a loosely organised social system where people solely care about themselves and their immediate families (Hofstede, 2001). As a result, they prioritise elements like obedience, self-discipline, and family security (Stern, 2000), which are independent of one another and have their own goals (Kumar & Sreen, 2020).

Individualistic people are driven to be successful, supervise and dominate others and resources, acquire social status and reputation, and demonstrate competence by societal norms (Rahman & Reynolds, 2019). People with individualistic values are typically highly competitive and selfish and are less inclined to act in behaviours that benefit the environment because of their strong instrumental orientation, which causes them to purposefully evaluate the costs and benefits of such actions (Kautish & Sharma, 2019). Besides, individualists are more inclined to act in an environmentally conscious manner when their needs have been met, since individuals require more resources to accomplish their own objectives (Wang et al., 2020a). Accordingly, consumer opinions and intentions to favour pro-environmental products and services, including green hotels, are frequently negatively impacted by individualistic values (Ray et al., 2024; Wang et al., 2024d). Individualistic value might discover individuals' ethical opposition to the objectives of environmental movements' goals (Stern, 2000), but the ways individualistic value effects pro-environmental behaviour are not well known (Wang et al., 2022a).

Individualistic values have been shown to influence pro-environmental behaviour, particularly in Western countries (Wang et al., 2021). Choi et al. (2015) reported that customers are discouraged from staying at green hotels due to their individualistic values, while Bouman and Steg (2019) found that individualistic values have been shown to have a negative impact on consumers' pro-environmental engagement in green marketing. Hajiheydari and Delgosha (2023) showed that people who lack collectivistic values consider that the civic campaign should be in line with their personal interests and do not think that citizens are responsible regarding societal concerns. Nevertheless, recent empirical studies have challenged the traditional cultural value typology by showing that individualistic values also significantly and positively influenced consumers with collectivistic value backgrounds in adopting pro-environmental behaviours such as green hotel visits (Hong et al., 2024; Sadiq et al., 2022). Thus, the hypotheses are proposed for testing:

H2a: Individualistic value *significantly* correlated to ecocentric attitude.
H2b: Individualistic value *significantly* correlated to anthropocentric attitude.
H2c: Individualistic value *significantly* correlated to intention.
H2d: Individualistic value *significantly* correlated to willingness to pay more.

2.4 Environmental attitude in the theory of planned behaviour and value-belief-norm theory

Environmental attitude refers to a combination of a person's opinions, emotions, feelings, and behavioural intentions towards environmental concerns or activities (Schultz et al., 2004). More than half of all publications about environmental psychology deal with environmental attitude (Milfont & Duckitt, 2010), which is a strong predictor of ecologically significant behaviour and concern for the natural environment (Rahman & Reynolds, 2019). Environmental attitude studies

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often reveal that people claim they have positive opinions about the environment (Wang et al., 2020b). However, because people's behaviour can occasionally deviate from their attitudes depending on various scenarios and contexts, changes in environmental attitudes can have an impact on an individual's personal feelings as well as direct and indirect effects on their behaviour in various situations (Boncinelli et al., 2019). In other words, individuals may hold comparable attitudes about an object, but their motivations may vary (Ledgerwood et al., 2018).

In the theory of planned behaviour, an attitude refers to a favourable or unfavourable evaluation of a given behaviour in question (Ajzen, 1991), which is the most accurate predictor of behavioural intention (Niloy et al., 2023). A favourable attitude towards a green product is generated by product characteristics that meet consumer needs while maintaining environmental sustainability (Situmorang et al., 2021). For example, an individual's positive or negative attitude can be expressed by evaluating or engaging in visiting green hotels because they can assess whether visiting green hotels is desirable or bad and whether or not they should engage in this behaviour (Wang et al., 2024d). As such, this kind of attitude was only assessed through the strength of associations between a particular object and one's positive or negative evaluation attributes (Levine & Strube, 2012). Hence, an individual's intention to engage in a particular behaviour is strengthened when they have a more positive attitude about it (Nimri et al., 2020), which refers to an anthropocentric attitude (Wang et al., 2024d).

Besides, the value-belief-norm theory suggests that the ecological worldview, which is measured by the new environmental paradigm scale, is a complete perspective on human-environment relations that promotes attitudes and beliefs relevant to the environment (Kiatkawsin & Han, 2017), which refers to ecocentric attitude (Wang et al., 2024d). This kind of attitude contends that human actions have a detrimental effect on a sensitive biosphere (Stern et al., 1999). As such, individuals show great interest in social, legal, and political issues about the protection of the environment, and for each of these issues, they have their own views and suggestions on how they should be approached (Kilbourne & Pickett, 2008). According to Leonidou et al. (2010), individuals having ecocentric attitudes can have a direct effect on public environmental policy-making, but an indirect effect on the protection behaviours of the natural environment. For example, a love of nature or an emotional attachment to the environment may be prerequisites for staying at green hotels (Wang et al., 2024c).

Therefore, the environmental attitude construct can be regarded as multifaceted in green marketing (Milfont & Duckitt, 2010; Wang et al., 2024c). The techniques of measuring attitudes can be broadly categorised into direct self-declaration and self-reflection, which can be either positive or negative based on cognition and affect (Patwary et al., 2022; Sarabia-Andreu & Sarabia-Sánchez, 2018). Indeed, the concept of environmental attitude can be divided into two basic components of attitudinal perspectives pertaining to the natural environment: ecocentric and anthropocentric attitude (Milfont & Duckitt, 2004). Ecocentric and anthropocentric attitudes favourably influence consumers' intentions to pay a premium to visit green hotels (Patwary et al., 2022; Rahman & Reynolds, 2019). Nevertheless, prior research has not thoroughly examined how consumers' intentions to visit green hotels are influenced by the distinctions between ecocentric and anthropocentric attitudes (Patwary et al., 2022).

2.4.1 Ecocentric attitude

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Ecocentric attitude refers to an individual's concern for the environment as a whole and emphasises nature (Thompson & Barton, 1994). The ecocentric philosophy holds that nature and ecosystems have inherent value and should be conserved for this purpose (Dunlap, 2008). Hence, ecocentric attitude focuses on protecting the environment for its own sake (Patwary et al., 2022), and it accords all non-human organisms with the same moral standing as humans (Rahman & Reynolds, 2019). This means that the ecocentric ethic conveys moral concern to nature because it believes it has intrinsic and fundamental value (Kortenkamp & Moore, 2001). Individuals with ecocentric attitudes are highly interested in social, legal, and political matters concerning environmental preservation, and they each have their own opinions and recommendations on how to address and preserve these issues (Kilbourne & Pickett, 2008). For example, when customers want to support environmental concerns and promote local culture, they are more likely to patronise green hotels (Ray et al., 2024). Therefore, individuals with ecocentric attitudes may directly affect public environmental policies, but they may also indirectly affect the preservation of the natural environment (Leonidou et al., 2010).

Several studies have used ecocentric attitude measures in green marketing (Milfont & Duckitt, 2010). In particular, the new environmental paradigm employs broad environmental studies that are popular in the value-belief-norm theory to assess the overall link between humans and the environment (Rahman & Reynolds, 2019; Wang et al., 2024c). Because the new environmental paradigm scale asserts that human activity harms the environment and a fragile biosphere, it has historically operationalised the concept as ecocentric attitude (Milfont & Duckitt, 2010; Wang et al., 2024d). Public engagement in society and the environment encompasses a holistic human-environment interactions perspective (Özekici, 2022) that influences environmental beliefs, attitudes, and behaviours (Milfont & Duckitt, 2010; Wang et al., 2024d). For example, customers may visit green hotels because they are aware of the negative consequences of not doing so (Wang et al., 2023a), resulting in increased support for environmentally friendly infrastructures and facilities (Patwary et al., 2022).

However, the literature's reliance on self-report measures of attitudes, which are subject to biases like social desirability and normative beliefs, may be a problem with ecocentric attitude (Levine & Strube, 2012; Sarabia-Andreu & Sarabia-Sánchez, 2018). This could lead to a low correlation between reported and observed actual pro-environmental behaviours (Wang et al., 2024c). Nevertheless, the new environmental paradigm scale, which examines ecocentric attitudes and beliefs, is the most often used approach for analysing environmental concerns (Milfont & Duckitt, 2010). Wang et al. (2024d) found that ecocentric attitude had a significant impact on consumers' awareness of the consequences of staying at green hotels, while Patwary et al. (2022) observed that ecocentric attitude positively affected tourists' intentions to visit green hotels. Hence, we proposed that:

H3a: Ecocentric attitude *significantly* correlated to intention.
H3b: Ecocentric attitude *significantly* correlated to willingness to pay more.

2.4.2 Anthropocentric attitude

Anthropocentric attitude asserts that humans are the centre of the world (Yoon & Kim, 2016),

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and hence nature and all other forms of life should be preserved for the benefit of humans (Rahman & Reynolds, 2019). According to the anthropocentric attitude, which is grounded on a pragmatic philosophy, the environment should be protected because it enhances or contributes to human well-being (Thompson & Barton, 1994; Yoon & Kim, 2016). The values underlying anthropocentric environmental support are that any threat to environmental sustainability, positive or negative, is viewed as a threat to our health (Yoon & Kim, 2016) and represents unconscious or difficult to articulate feelings towards that stimulus (Levine & Strube, 2012). Anthropocentric attitude is assumed to be less vulnerable to biases (Greenwald & Banaji, 1995) because it can be measured by the degree to which specific objects are associated with one's positive or negative evaluation attributes (Wang et al., 2024c). For instance, people's anthropocentric attitude can be expressed positively or negatively by evaluating visiting green hotels because anthropocentric attitudes include people's opinions about whether or not it is desirable or bad to visit green hotels and whether or not they should engage (Wang et al., 2024d).

The significance of anthropocentric attitude towards pro-environmental activities is emphasised by measures of anthropocentric attitude (Patwary et al., 2022; Wang et al., 2024c), such as the implicit association test (Greenwald & Banaji, 1995), or predictors of intentions, such as the theory of planned behaviour (Ajzen, 1991). Niloy et al. (2023) showed that the attraction to purchase green products is positively influenced by anthropocentric attitude. According to Haq et al. (2023) and Al-Gharibah and Mahfod (2022), tourists' intention to visit green hotels is favourably influenced by anthropocentric attitudes. In addition, consumers with anthropocentric attitude are more likely to engage in pro-environmental behaviours, although this attitude involves inconveniences, additional costs, and lower levels of product performance because they are likely to be motivated to take actions that will minimise negative impacts (Leonidou et al., 2010). Hence, the following hypotheses are proposed:

H4a: Anthropocentric attitude *significantly* correlated to intention.
H4b: Anthropocentric attitude *significantly* correlated to willingness to pay more.

2.4.3 Ecocentric attitude and anthropocentric attitude

Although some research has shown that pro-environmental behaviour is favourably correlated with both ecocentric and anthropocentric attitudes (Wang et al., 2024c; Yoon & Kim, 2016), no study has examined the correlation between ecocentric and anthropocentric attitude. Nonetheless, consumers with ecocentric attitudes believe that nature should be preserved because its transcendental characteristics, even if these environmental problems were not significant (Thompson & Barton, 1994). This is because anthropocentric attitude towards the environment are based on human-centred and fundamentally utilitarian values; people are less likely to take action to protect the environment if other human-centred values, such as the material quality of life or wealth accumulation, are obtained in this manner (Thompson & Barton, 1994).

Contrarily, people with ecocentric attitudes perceive the environment as an opportunity for enhancing the human spirit, which is valuable regardless of how it contributes to materialistic human goals, even if doing so results in discomfort, inconvenience, and cost that could lower their material standard of living (Thompson & Barton, 1994). According to the philosophical views of people-environment connections (Stokols, 1990), ecocentric attitude should thus have

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an impact on anthropocentric attitude because it is a macro-level perspective. According to research by Özekici (2022), ecocentric attitude influences consumers' norm beliefs, which in turn affects their anthropocentric attitude towards preventing food waste in restaurants. Thus, the following hypothesis is proposed for testing:

H5: Ecocentric attitude *significantly* correlated to anthropocentric attitude.

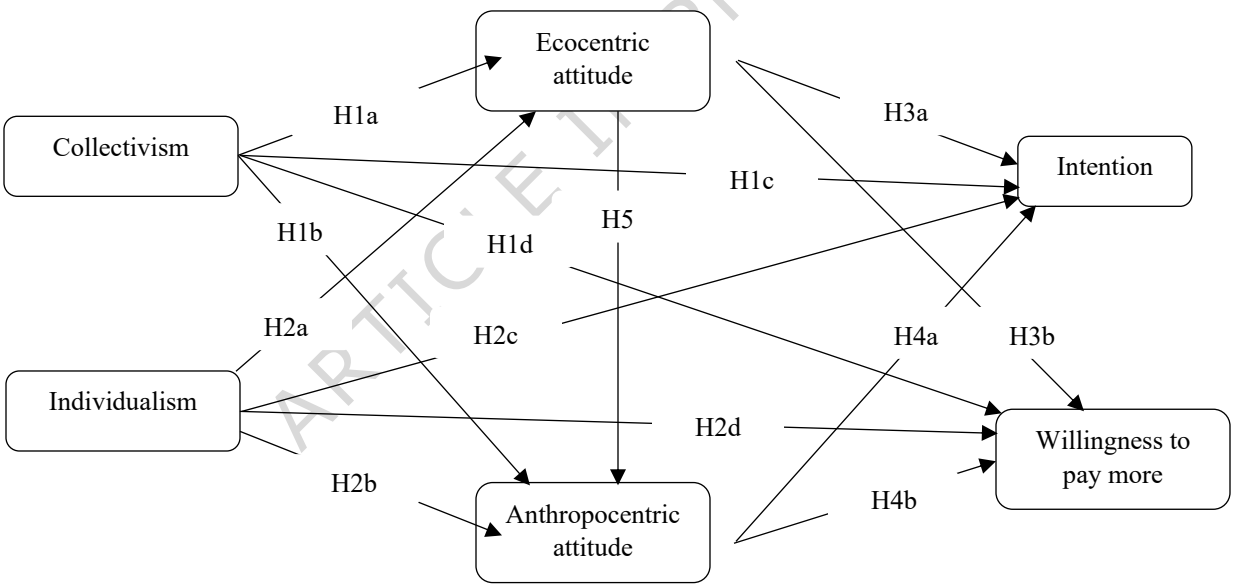

Figure 1. Theoretical research framework

3. Methods

3.1 Sample

This study used an online survey of undergraduate and graduate students in five universities in Xuzhou City, Jiangsu Province; Jiaozuo City, Henan Province; and Taiyuan City, Shanxi Province, China. This is because Henan Province has the most universities/colleges and students, Jiangsu Province has the second most universities/colleges and students, and Shanxi Province also has more than 1 million university/college students in 2024. Thus, the required answers from these regions may produce high representativeness. The target population is university

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students because highly educated people may provide more accurate answers than less educated people (Kumar, 2021); young generations can provide valuable insights into research on green marketing since they are more aware of environmental concerns (Varah et al., 2021); they are more willing to purchase novel products or services (Wang et al., 2024d); they are the future tourists (Han et al., 2019); and they dominate a large portion of the hotel market share (Wang et al., 2022a).

The questionnaires were distributed to students who enrolled in various courses and were asked to participate in class, and were requested to complete the online survey from September 20 to October 31, 2024. All participation was voluntary, without compensation, and they could withdraw at any time, as explained to the participants. In addition, ethical approval was required for this study according to the regulations of the Business School Research Ethics Review Committee, Xuzhou University of Technology (Approval Number: September 16, 2024). A total of 314 responses were gathered for analysis; 18 were from minors of those who had never been in a hotel in the last year. This left 296 valid responses, yielding a 94.3% efficiency rate.

For this study, the reasonable sample size requirement was based on Sekaran and Bougie (2016), who showed that a sample size larger than 30 and less than 500 is adequate for most research. Indeed, according to Hair Jr et al. (2013), a sample size of more than 200 has been found to provide an acceptable margin of error. In particular, considering this study further adopted structural equation modelling (SEM) to test the hypotheses proposed, a minimum sample size for empirical surveys is 200 respondents, and between 10 and 20 cases per parameter is considered (Kline, 2023). In addition, according to Hair Jr et al. (2013), as a general rule, the minimum is to have at least five times as many observations as the number of variables to be analysed, and a more acceptable sample size would have a 10:1 ratio. There were 25 measurement items in this study, with a target of 250 cases. Hence, 296 valid questionnaires were acceptable and can be used for further data analysis.

3.2 Measurement

All items on the five-point Likert scale were adapted from earlier research on green marketing. Collectivistic value was measured using six items adopted from Wang et al. (2020a), individualistic value was measured using four items adopted from Laroche et al. (2001), four items belonging to ecocentric attitude were adopted from Kiatkawsin and Han (2017), anthropocentric attitude was measured using four items adopted from Wang et al. (2024d), four items belonging to intention were adopted from Rahman and Reynolds (2016) and Wang et al. (2022a), willingness to pay more was measured using three items adopted from Saleem (2021). Demographic details such as age, gender, monthly income, degree of education, majors, and the frequency of hotel visits within the last year are included in the last section. 30 respondents participated in a pilot test to guarantee the questionnaire's validity and understanding.

3.3 Statistic tools

This study adopts structural equation modelling (SEM) to explain the correlations between constructs and test the hypotheses proposed in the study. SEM is an advanced statistical method that builds a model and estimates parameters to examine causal links between constructs (Liu et

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al., 2024). In contrast to traditional multivariate statistical methods, which can only test the single relationship between independent variables and dependent variables (Wang et al., 2024a), SEM allows researchers to conduct and combine a vast variety of statistical procedures like multiple regression, factor analysis, and many others in a flexible way (Nachtigall et al., 2003). Moreover, SEM produces more accurate results than traditional regression analysis and accounts for measurement errors in both independent and dependent variables (Wang et al., 2024a). In addition, covariance-based SEM was used for this study as it considers the constructs as common factors that explain the covariation between its associated indicators (Hair Jr et al., 2021) and determines how well the model can estimate the covariance matrix for the sample data with the ultimate goal of confirming theory (Hair Jr et al., 2014).

3.4 Common method bias (CMB)

In order to mitigate the CMB during the procedural process, as recommended by Podsakoff et al. (2003), all variable measurements were obtained from various research. A five-point Likert scale with a semantic differential format from very unimportant to very important was used to assess individualistic value. The rest of the questionnaire employed a five-point Likert scale from strongly disagree to strongly agree. Three professionals in hospitality and tourism evaluated the questionnaire items to help respondents understand them better. Additionally, respondents were assured of the confidentiality of their personal information, their responses were anonymous, and this study had no current or incorrect answers. Moreover, the variance inflation factor value should be less than 3.3 (Kock, 2015), and a single factor should not be accounted for more than 50% of the variance using Harman's single factor method. Results showed that although all variance inflation factor values are below 3.3 (see **Table 2**), 53.235% of the variation was explained by the first component, suggesting that CMB might be a problem in this investigation.

In addition, because the variance inflation factor value for anthropocentric attitude is close to the critical limit, the linear regression with collinearity diagnostics test was performed to determine whether multicollinearity is an issue in the study. The results show that when willingness to pay more or intention is a dependent variable, the variance inflation factor value for anthropocentric attitude, ecocentric attitude, individualism, and collectivism is 2.428, 2.158, 1.139, and 1.137 respectively, which are less than the threshold value of 10 (Hair Jr et al., 2013), indicating multicollinearity is not an issue to study.

Next, we followed Podsakoff et al. (2003), who suggested controlling for the effects of a single unmeasured latent method factor to eliminate or minimise the effect of CMB on the study. According to Podsakoff et al. (2003), one of the main advantages of controlling for the effects of a single unmeasured latent method factor is that it does not require the researchers to identify and measure the specific factor responsible for the method effects. Meanwhile, this technique models the effect of the method factor on the measures rather than on the latent constructs they represent and does not require the effects of the method factor on each measure to be equal (Podsakoff et al., 2003). Hence, we added a first-order factor with all the measures as indicators to the current study's model. Following confirmatory factor analysis, the standardised regression weights of all items in the without-first-order factor model and with-first-order factor model varied from 0.098 to 0.511, which was higher than 0.2 (Gaskin, 2022). Thus, we created common method bias-adjusted composites, which meant that the research model retained the first-order factor with all

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the measures as indicators using the data imputation method in the model for testing hypotheses proposed in the structural model.

4. Results

There were 296 valid questionnaires returned (See **Table 1**), with approximately 59.1% of respondents being female, the majority being 19 years old, 69.6% reporting that their monthly living expenses were between 1500 and 2500 Chinese yuan (RMB), the majority being enrolled in management-related majors (17.6%), and 52.4% reporting that they had visited hotels two to four times in the last year.

Table 1. Sample characteristics ($N = 296$).

Items	Characteristics	Frequency	Percentage (%)
Gender	Male	121	40.9
	Female	175	59.1
Age	18	21	7.1
	19	81	27.4
	20	79	26.7
	21	60	20.3
	22	26	8.8
	23	21	7.1
	24	3	1.0
	25	2	0.7
	Above 25	3	1.0
Monthly living spends	Below 1500 RMB	59	19.9
	1500 – 2500 RMB	206	69.6
	2501 – 3500 RMB	23	7.8
	Above 3500 RMB	8	2.7
Majors	Finance-related majors	33	11.2
	Management-related majors	52	17.6
	Sport-related majors	12	4.1
	Engineering-related majors	21	7.1
	Humanities-related majors	8	2.7
	Foreign language-related majors	11	3.7
	Design-related majors	9	3.0
	Mathematic-related majors	6	2.0
	Physical-related majors	7	2.4
	Chemistry-related majors	17	5.7
	Philosophy-related majors	21	7.1

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	Law-related majors	9	3.0
	Education-related majors	27	9.1
	History-related majors	16	5.4
	Agricultural-related majors	15	5.1
	Other	32	10.8
Visit hotels in past year	One time	50	16.9
	2-4 times	155	52.4
	5-7 times	36	12.2
	8-10 times	30	10.1
	More than 10 times	25	8.4

4.1 Measurement model test

This study conducted the covariance-based measurement assessment that included internal reliability, factor loadings, convergent validity and discriminant validity as proposed by Hair Jr et al. (2013). Initially, the internal reliability (Cronbach's alpha value) should be higher than 0.7, and factor loading for each item should be higher than 0.5 and ideally higher than 0.7 (Hair Jr et al., 2013). To assess the convergent validity of the measurement model, the composite reliability should be higher than 0.7, and the average variance extracted should be higher than 0.5 (Hair Jr et al., 2013). As shown in **Table 2**, all the composite reliability values exceeded 0.7, and the average variance extracted values are higher than 0.5, indicating convergent validity was established. Meanwhile, as presented in **Table 3**, the square root of the average variance extracted value of a construct is higher than its correlations with other constructs (Byrne, 2016), and the correlation between each construct in the Heterotrait-Monotrait Ratio test is less than 0.9 (Henseler et al., 2015), indicating that the discriminant validity was established.

Table 2. Reliability and validity of the measurement model.

Construct (Cronbach's alpha)	**Items**	**Factor loadings**	**CR**	**AVE**	**VIF**
Collectivism (α = 0.921)	1. I like to work hard for the accomplishment of goals of my group	0.832	0.938	0.717	1.779
	2. I like to help others in a time of need	0.849			
	3. I like to maintain ward relationships with others	0.810			
	4. To do well in life, the help of friends is crucial	0.835			
	5. One of the pleasures in life is to be interdependently related to others	0.869			
	6. One of the pleasures in life is to feel part of a large group of people	0.882			
Individualism (α = 0.895)	1. A sense of accomplishment	0.824	0.927	0.762	1.479
	2. Self-respect	0.878			
	3. Self-fulfilment	0.901			
	4. Independent (i.e., self-reliant, self-sufficient)	0.887			
Ecocentrism (α = 0.877)	1. The balance of nature is very delicate and easily upset	0.828	0.915	0.730	2.697
	2. Humans are severely abusing the environment	0.839			
	3. Earth is like a spaceship with limited room and resources	0.880			
		0.870			

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	4. We are not doing enough at the moment to protect the environment				
Anthropocentrism (α = 0.965)	For me, staying at green hotels when travelling is:	0.935	0.975	0.906	3.170
	1. Good	0.952			
	2. Desirable	0.960			
	3. Pleasant	0.960			
	4. Wise				
Intention (α = 0.964)	1. I am willing to stay at a green hotel when travelling	0.937	0.973	0.901	-
		0.954			
	2. I plan to stay at a green hotel when travelling	0.952			
	3. I will make an effort to stay at a green hotel when travelling	0.955			
	4. I plan to recommend green hotels to others				
Willingness to pay (α = 0.973)	1. It is acceptable to pay more for a green hotel that engages in green practices	0.970	0.982	0.948	-
		0.980			
	2. I am willing to pay more for a green hotel	0.971			
	3. I am willing to spend extra in order to stay at a green hotel				

Note: compositive reliability (CR). Average variance extracted (AVE). variance inflation factor (VIF).

Table 3. Discriminate validity of the measurement model.

Fornell-Larcker Criterion						
Construct	1	2	3	4	5	6
1. Anthropocentrism	***0.952***					
2. Collectivism	0.625	***0.846***				
3. Ecocentrism	0.786	0.522	***0.854***			
4. Individualism	0.499	0.500	0.483	***0.873***		
5. Intention	0.866	0.694	0.732	0.475	***0.949***	
6. Willing to pay	0.528	0.610	0.494	0.330	0.687	***0.974***
Heterotrait-Monotrait Ratio (HTMT)						
Construct	1	2	3	4	5	6
1	-					
2	0.660	-				
3	0.848	0.579	-			
4	0.535	0.549	0.542	-		
5	0.897	0.736	0.792	0.511	-	
6	0.544	0.646	0.536	0.352	0.710	-

In addition, the model fit indexes of the measurement model showed that Chi-square = 778.333, degree of freedom = 260, Chi-square divided by the degree of freedom value = 2.994, which is less than the upper limit of the index value requirement of 3 (good), comparative fit index = 0.938, which is higher than the required 0.9, standardised root mean square residual = 0.0505, which is less than the upper limit of the index value requirement of 0.1, parsimony goodness of fit index = 0.655, which is higher than the required 0.5, non-normed fit index = 0.91, which is higher than the required 0.9, relative fit index = 0.896, which is close to the required 0.9, incremental fit index = 0.938, which is higher than the required 0.9, Tucker-Lewis index = 0.928, which is higher than the required 0.9, parsimony normed fit index = 0.789, which is higher than the required 0.5, parsimony comparative fit index = 0.813, which is higher than the required 0.5, root mean square error of approximation = 0.082, which is less than the upper limit of the index value requirement of 0.1, indicating an acceptable model fit (See **Table 4**).

Table 4. Summary of fit indices for measurement model and structural model.

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Fit indices	Value[a]	Value[b]	Recommended value	Results	References
CMIN/DF	2.994	2.75	< 3 is good, < 5 is permissible	Satisfactory	
CFI	0.938	0.945	≥ 0.9	Satisfactory	Hair Jr et al. (2013)
SRMR	0.0505	0.049	≤ 0.1	Satisfactory	
PGFI	0.655	0.671	≥ 0.5	Satisfactory	Hooper et al. (2008)
NFI	0.91	0.917	≥ 0.9	Satisfactory	Byrne (2016)
RFI	0.896	0.904	≥ 0.9	Satisfactory	
IFI	0.938	0.945	≥ 0.9	Satisfactory	Meyers et al. (2016)
PNFI	0.789	0.798	≥ 0.5	Satisfactory	
PCFI	0.813	0.822	≥ 0.5	Satisfactory	
TLI	0.928	0.937	≥ 0.9	Satisfactory	Hu and Bentler (1999)
RMSEA	0.082	0.077	< 0.08 is good, < 0.1 is permissible	Satisfactory	Byrne (2016); Kline (2023)

Note: Measurement model fit indices (Value[a]). Structural model fit indices (Value[b]). Chi-square divided by the degree of freedom (CMIN/DF). Comparative fit index (CFI). Standardised root mean square residual (SRMR). Parsimony goodness of fit index (PGFI). Non-normed fit index (NFI). Relative fit index (RFI). Incremental fit index (IFI). Tucker-Lewis index (TLI). Parsimony normed fit index (PNFI). Parsimony comparative fit index (PCFI). Root mean square error of approximation (RMSEA).

4.2 Structural model test

The model fit indexes of the structural model are Chi-square = 717.779, degree of freedom = 261, Chi-square divided by the degree of freedom value = 2.75, which is less than the upper limit of the index value requirement of 3 (good), comparative fit index = 0.945, which is higher than the required 0.9, standardised root mean square residual = 0.049, which is less than the upper limit of the index value requirement of 0.1, parsimony goodness of fit index = 0.671, which is higher than the required 0.5, non-normed fit index = 0.917, which is higher than the required 0.9, relative fit index = 0.904, which is higher than the required 0.9, incremental fit index = 0.945, which is higher than the required 0.9, Tucker-Lewis index = 0.937, which is higher than the required 0.9, parsimony normed fit index = 0.798, which is higher than the required 0.5, parsimony comparative fit index = 0.822, which is higher than the required 0.5, root mean square error of approximation = 0.077, which is less than the upper limit of the index value requirement of 0.08 (good), indicating an acceptable model fit (See **Table 4**).

4.3 Hypotheses verification

As shown in **Table 5** and **Figure 2**, collectivism insignificantly influences ecocentric attitude with a small effect since $\beta = 0.063$, $p > 0.05$, $f^2 = 0.027$; thus, H1a is rejected. Collectivism positively influences anthropocentric attitude with a small effect as $\beta = 0.177$, $p < 0.05$, $f^2 = 0.104$; thus, H1b is supported. Collectivism positively influences intention to visit green hotels with a large effect as $\beta = 0.306$, $p < 0.05$, $f^2 = 0.697$; thus, H1c is supported. Collectivism positively influences willingness to pay more for green hotel visits with a large effect since $\beta = 0.482$, $p < 0.05$, $f^2 = 0.497$; thus, H1d is supported.

The results show that individualism significantly influences consumer ecocentric attitude with a moderate effect since $\beta = -0.471$, $p < 0.05$, $f^2 = 0.264$; thus, H2a is supported. Individualism significantly influences anthropocentric attitude with a small effect as $\beta = -0.387$, $p < 0.05$, $f^2 = 0.026$; thus, H2b is supported. Individualism positively influences intention to visit green hotels with a large effect since $\beta = 0.392$, $p < 0.05$, $f^2 = 0.566$; thus, H2c is supported. In

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addition, individualism positively influences willingness to pay more with a large effect as $\beta = 0.49$, $p < 0.05$, $f^2 = 0.486$; thus, H2d is supported.

Moreover, the results of this study show that ecocentric attitude positively influences intention with a small effect since $\beta = 0.294$, $p < 0.05$, $f^2 = 0.059$; thus, H3a is supported. Ecocentric attitude positively influences willingness to pay more for visiting green hotels with a small effect since $\beta = 0.404$, $p < 0.05$, $f^2 = 0.003$, thus, H3b is supported. Anthropocentric attitude positively influences intention with a large effect since $\beta = 0.774$, $p < 0.05$, $f^2 = 0.783$; thus, H4a is supported. Anthropocentric attitude positively influences consumer willingness to pay more for staying at green hotels with a small effect as $\beta = 0.375$, $p < 0.05$, $f^2 = 0.043$; thus, H4b is supported. In addition, the results also show that ecocentric attitude positively influences anthropocentric attitude with a moderate effect since $\beta = 0.363$, $p < 0.05$, $f^2 = 0.184$; thus, H5 is supported.

Table 5. Results of the study.

Item	Correlation	Estimate	C.R.	P-value	Cohen's f^2	Decision
H1a	Collectivism ----------> Ecocentric attitude	0.063	0.610	0.542	0.027	No-supported
H1b	Collectivism ----------> Anthropocentric attitude	0.177	2.473	0.013	0.104	Supported
H1c	Collectivism ----------> Intention	0.306	5.053	***	0.697	Supported
H1d	Collectivism ----------> Willingness to pay	0.482	6.403	***	0.497	Supported
H2a	Individualism ----------> Ecocentric attitude	-0.471	-2.978	0.003	0.264	Supported
H2b	Individualism ----------> Anthropocentric attitude	-0.387	-2.436	0.015	0.026	Supported
H2c	Individualism ----------> Intention	0.392	3.226	0.001	0.566	Supported
H2d	Individualism ----------> Willingness to pay	0.490	3.242	0.001	0.486	Supported
H3a	Ecocentric attitude ----------> Intention	0.294	2.589	0.010	0.059	Supported
H3b	Ecocentric attitude ----------> Willingness to pay	0.404	2.727	0.006	0.003	Supported
H4a	Anthropocentric attitude ---> Intention	0.774	6.428	***	0.783	Supported
H4b	Anthropocentric attitude ---> Willingness to pay	0.375	2.633	0.008	0.043	Supported
H5	Ecocentric attitude ----------> Anthropocentric attitude	0.363	2.417	0.016	0.184	Supported

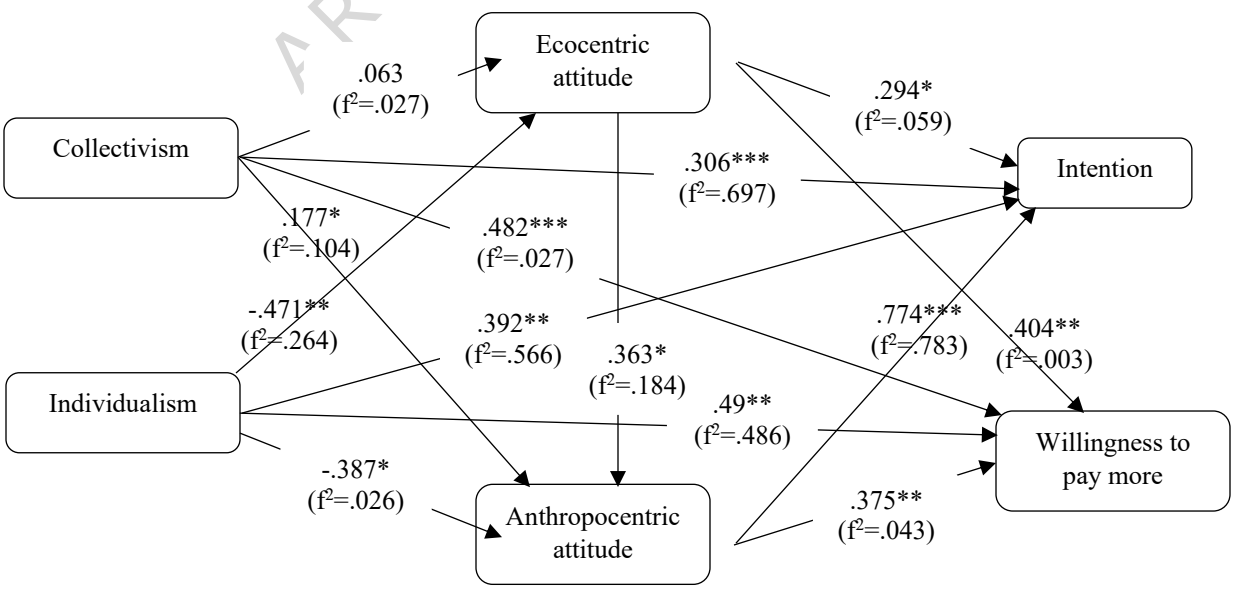

Figure 2. Results of the study

4.4 Mediational test

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Moreover, previous empirical studies suggested that ecocentric attitude or anthropocentric attitude plays a mediational role between collectivism/individualism and intention or willingness to pay more for visiting green hotels (Sadiq et al., 2022; Wang et al., 2024b; Wang et al., 2024d). Thus, the bias-corrected percentile method of bootstrapping with two-tailed significance was used to investigate the mediational effects of ecocentric attitude and anthropocentric attitude between collectivism, individualism, intention, and willingness to pay more.

As shown in **Table 6**, the results show that the specific indirect effects of ecocentric attitude on collectivism and intention and willingness to pay more were higher than the significance level; thus, ecocentric attitude cannot mediate the relationship between collectivism and intention and willingness to pay more for visiting green hotels, respectively. The specific indirect effects of anthropocentric attitude on collectivism and intention and willingness to pay more were higher than the significance level; thus, anthropocentric attitude also cannot mediate the relationship between collectivism and intention and willingness to pay more for green hotel visits separately. In addition, the specific indirect effects of ecocentric attitude on collectivism and anthropocentric attitude were higher than the significance level; thus, ecocentric attitude cannot mediate the correlation between collectivism and anthropocentric attitude.

Meanwhile, the specific direct and indirect effects of ecocentric attitude on collectivism and intention and willingness to pay more were less than the significance level; thus, ecocentric attitude partially mediates the relationship between collectivism and intention and willingness to pay more, respectively. The specific direct and indirect effects of anthropocentric attitude on individualism, intention and willingness to pay more were less than the significance level; thus, anthropocentric attitude plays a partial mediational role between individualism and intention and willingness to pay more for green hotel visits. Furthermore, ecocentric attitude fully mediates the relationship between individualism and anthropocentric attitude since direct effects were higher than the significance level and indirect effects were less than the significance level.

Table 6. Mediational test results.

Path	**Direct effect p-value**	**Indirect effect p-value**	**Decision**
Collectivism ---> ecocentric attitude ---> intention	> 0.05	> 0.05	No mediation
Collectivism ---> ecocentric attitude ---> willingness to pay more	> 0.05	> 0.05	No mediation
Collectivism ---> anthropocentric attitude ---> intention	> 0.05	> 0.05	No mediation
Collectivism ---> anthropocentric attitude ---> willingness to pay more	> 0.05	> 0.05	No mediation
Collectivism ---> ecocentric attitude ---> anthropocentric attitude	> 0.05	> 0.05	No mediation
Individualism ---> ecocentric attitude ---> intention	< 0.05	< 0.05	Partial mediation
Individualism ---> ecocentric attitude ---> willingness to pay more	< 0.05	< 0.05	Partial mediation
Individualism ---> anthropocentric attitude ---> intention	< 0.05	< 0.05	Partial mediation
Individualism ---> anthropocentric attitude ---> willingness to pay more	< 0.05	< 0.05	Partial mediation
Individualism ---> ecocentric attitude ---> anthropocentric attitude	> 0.05	< 0.05	Full mediation

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4.5 Analysis of variance

Previous studies have shown that using demographic characteristics in explaining consumers' green hotel visits produces inconsistent results (Wang et al., 2023a). Nevertheless, demographics is still one of the most widely used methods for investigating consumer green purchase behaviour due to its simplicity to understand and can be applied easily to segmentation problems (Wang et al., 2020b). An independent sample t-test was performed for gender influence in different constructs, while ANOVA was conducted to test the significance of various age, monthly living spends, majors, and frequency of visiting hotels in different constructs.

The results of the study show that individualism and collectivism for gender are significantly different. The average individualism for females was 0.07248 higher than that of males since $t_{214.425} = 1.942$, $p < 0.05$, while the average collectivism for females was 0.03242 higher than that of males since $t_{207.411} = 0.305$, $p < 0.05$. Furthermore, one-way ANOVA with Scheffe methods was used to compare the effects of age, monthly living spending, majors, and frequency of visiting hotels on collectivism, individualism, ecocentric attitude, anthropocentric attitude, intention, and willingness to pay more for staying at green hotels. The results show that there is no statistical difference between age, monthly living spending, majors, and frequency of visiting hotels towards collectivism, individualism, ecocentric attitude, anthropocentric attitude, intention, and willingness to pay more for green hotel visits.

5. Discussion

5.1 Collectivism

The findings demonstrate that collectivism has the most influence on intention since $f^2 = 0.697$. Individuals who perceive themselves as group-oriented are more likely to have a high likelihood of visiting green hotels in the future. Collectivism also has a large effect on willingness to pay more for visiting green hotels since $f^2 = 0.497$. This means that consumers who enjoy maintaining friendly connections with others are willing to pay more to visit green hotels. In addition, the findings of this study show that collectivism has a small effect on anthropocentric attitude since $f^2 = 0.104$. Individuals who prefer to live in an interdependent environment and society are more likely to exhibit a positive overall evaluation of green hotels' attributes, such as environmentally friendly products and services. All of these findings are in line with earlier research that showed that collectivism has a positive impact on consumer anthropocentric attitude, intention, and willingness to engage in pro-environmental behaviours (Hajiheydari & Delgosha, 2023; Wang et al., 2024f), like visiting green hotels (Wang et al., 2022a; Wang et al., 2020a).

The findings also show that collectivism has an insignificant impact on ecocentric attitude. This means that individuals who like to work hard for the accomplishment of goals of their groups, help others in a time of need, and maintain good relationships with others would not prioritise environmental concerns like protecting the environment and natural resources. This conclusion contrasts with Saleem (2021) and Gong et al. (2024), who found that collectivism has a significant impact on consumers' ecocentric attitudes. One possible reason is that pro-environmental behaviours, such as visiting green hotels, are socially acceptable or considered

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correct behaviour in mind. Hence, previous studies' respondents may provide answers that they believe will make them appear favourable to others, rather than reflecting their true opinions and honesty. Therefore, the findings of this study regarding the effect of collectivism on ecocentric attitude towards purchasing green products or services, such as visiting green hotels, need to be investigated in the future.

5.2 Individualism

The findings indicate a complex relationship between individualism, ecocentric and anthropocentric attitudes, intention, and willingness to pay more for staying at green hotels. Ecocentric attitude is negatively influenced by individualism with a moderate effect, since f^2 = 0.264, while anthropocentric attitude is negatively influenced by individualism with a small effect, as f^2 = 0.026. These results mean that individuals who place greater emphasis on their own self-respect, self-fulfilment, and self-satisfaction are less likely to care about protecting the environment and natural resources, and they are less likely to consider green hotels' attributes, decorations, services, and other features. Individualistic people believe that protecting the environment and natural resources is unnecessary, and they do not believe that staying at green hotels is a wise or good decision. These results align with some earlier studies that indicate egoistic values (e.g., self-interest) or individualism have a strong and negative influence on consumers' pro-environmental behaviours and green hotel visits (Eid et al., 2021; Wibowo et al., 2022).

Meanwhile, our findings demonstrate that individualism has a positive impact on intention with a large effect, since f^2 = 0.566 and willingness to pay more with a large effect as f^2 = 0.486. This suggests that despite people's individualistic value orientation, they are still likely to visit green hotels in the future and are prepared to pay extra to stay at green hotels. This might be explained by the people's health issues as a reflection of their own self-interests, which is the origin of egoistic value (i.e., pro self-concept) (Sadiq et al., 2022; Yadav & Pathak, 2016). People who are looking for self-benefits like improved health and well-being are more likely to encourage themselves to use pro-environmental products and services in green hotels (Verma et al., 2019) because they are thought to be healthier than traditional hotels (Sadiq et al., 2022). Besides, pro-environmental behaviours are usually linked to self-interest considerations; individuals who strongly believe in individualistic values are extremely concerned with accomplishment, power, and prestige (Bouman & Steg, 2020). Hence, status-enhancing motivations such as luxury perceptions of green hotels may positively influence their visit intention and willingness to pay more.

5.3 Ecocentric and anthropocentric attitude

The findings show that ecocentric attitude positively influences intention with a small effect since f^2 = 0.059 and willingness to pay more with a small effect, since f^2 = 0.003. The results of this study also show that anthropocentric attitude positively influences intention with a large effect, since f^2 = 0.783, and willingness to pay more with a small effect, as f^2 = 0.043. These findings mean that people who value the environment and natural resources are prepared to balance their daily use of these resources, have a favourable opinion of all the various features and attributes of green hotels, and are more likely to stay at green hotels and be willing to pay

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more for them. These results are consistent with other studies that showed that customers' pro-environmental intentions are significantly influenced by their ecocentric and anthropocentric attitudes (e.g., green hotel visit intention) (Joshi et al., 2021; Wang et al., 2024c; Wang et al., 2024d) and willingness to pay more for green products (e.g., green hotels) (Casado-Díaz et al., 2020; Fauzi et al., 2024).

Furthermore, this study's findings show that ecocentric attitude has a positive influence on anthropocentric attitude, with a moderate effect towards visiting green hotels and willingness to pay more for staying at green hotels. This indicates that customers who are concerned about the environment and natural resources would have favourable opinions of green hotels and their associated green products and services. Ecocentric attitude may work at a macro level, guiding individuals to believe that nature is worth preserving due to transcendental goals and enhancing the human spirit, significantly influencing their anthropocentric attitude towards a specific object, even if this anthropocentric attitude is weak or negative towards an object due to utilitarian reasons, such as visiting green hotels being inconvenient and sacrificing the material quality of life.

6. Conclusion

6.1 Theoretical contributions

This study contributes to some theoretical contributions to the field of green marketing, like green hotel visits. First, applying individualism or egoistic value to all settings is inappropriate based on the value-belief-norm theory (Zhang et al., 2025), especially in some Eastern nations like China, India, and Malaysia, which have a strong collectivistic value orientation (Wang et al., 2022a; Wang et al., 2024d). The results of this study on green hotel visits in a highly collectivistic value country, i.e., China, indicate that collectivism has a positive impact on anthropocentric attitude, intention, and willingness to pay more while not affecting ecocentric attitude. Collectivistic value needs to be taken into consideration as a significant antecedent in understanding consumers' intentions to visit green hotels and their willingness to pay more.

Second, prior research has produced complex or controversial findings about how individualism or egoistic values affect consumers' pro-environmental behaviour. For example, some studies showed that individualism or egotism positively influences one's pro-environmental behaviour (Sadiq et al., 2022; Wibowo et al., 2022) and vice versa (Eid et al., 2021; Wibowo et al., 2022). Again, this may be because people who are highly competitive and selfish are less likely to act in pro-environmental behaviours, or who have met their own needs are more likely to act in pro-environmental behaviours since they require more resources to accomplish their own objectives (Kaufmann et al., 2012; Wang et al., 2020a). The findings of this study indicate that although individualism has a positive impact on intention and willingness to pay more for green hotels, it also has a negative impact on ecocentric and anthropocentric attitudes. This is important because an individual's future behaviour will be influenced by both ecocentric and anthropocentric attitudes. Thus, future research cannot ignore the influence of individualism on consumer green purchase behaviour, such as green hotel visits in highly collectivistic value societies.

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Third, consumers' positive attitudes towards green practices in the hospitality industry do not always emerge as a good predictor of their actual visit behaviours (Acampora et al., 2022). This type of gap has greatly interested scholars. According to Wang et al. (2024c), prior research typically used a single attitude dimension to predict consumers' pro-environmental behaviour in green marketing. However, it is important to know that consumers may visit green hotels due to concern about natural resources and the environment (i.e., ecocentric attitude in the value-belief-norm theory); but they also may visit green hotels due to curiosity and concern about the green hotels' attributes, products, and services that will benefit them personally (i.e., anthropocentric attitude in the theory of planned behaviour). This study reports that consumers' visits to green hotels are positively influenced by both ecocentric and anthropocentric attitudes. The influence of both types of attitudes in explaining why consumers choose to stay at green hotels should be the focus of future research.

Furthermore, few studies have examined how both types of attitudes shape consumers' pro-environmental behaviours (Wang et al., 2024c; Wang et al., 2024d). There is insufficient investigation into how ecocentric and anthropocentric attitudes relate to one another. It is theoretically expected that ecocentric attitude can influence anthropocentric attitude because ecocentric people will protect the environment and all natural resources because they have a self-transcendent standpoint. This will lead to their daily pro-environmental actions, such as staying at green hotels. This study's findings supported that anthropocentric attitude regarding the choice of green hotels is positively influenced by ecocentric attitude. Therefore, future research should consider that one's ecocentric attitude may be working at a macro level that influences his or her anthropocentric attitude, which is working at a micro level in a particular pro-environmental behaviour.

6.2 Practical implications

The results show that collectivism positively influences anthropocentric attitude, intention, and willingness to pay more for green hotel visitation. Green hotels need to highlight and implement green strategies, including green products (e.g., recyclable shampoo packages and organic foods) and services (e.g., green supply chain) that are consistent with the group's goals for consumers in their advertisements and promotions. Those pro-environmental products and services will enhance a good relationship between consumers and nature and provide a pleasurable and healthy lifestyle for consumers and the next generations.

Because our results show that individualism negatively affects consumers' ecocentric and anthropocentric attitudes, this may significantly reduce the possibility of consumers visiting green hotels in the future. Hence, environmental knowledge and education should be reinforced at green hotels and at the national level. Consumers should be acknowledged for how many natural resources they utilise when they are staying at a traditional hotel to fulfil their personal needs, which will result in a significant negative influence on other living environments and their future living environments.

On the other hand, the results of this study show that individualism positively influences visit intention and willingness to pay more for green hotels. According to Kaufmann et al. (2012), individualistic consumers prefer/refuse to purchase/consume pro-environmental products

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or services because they have a strong selfish and competitive orientation and are less likely to perform pro-environmental behaviours or have satisfied their own needs, are subsequently more likely to perform green purchase behaviour since they need to use more natural resources to achieve their goals. In this circumstance, individuals may perceive financial benefits or perceived health benefits rather than environmental concerns that drive their intentions and willingness to pay for green hotels. Therefore, green hotels also need to provide relatively competitive pro-environmental products, services, and prices compared with traditional hotels since green hotels cannot require consumers to sacrifice their self-fulfilment and self-sufficiency to visit a low value-for-money accommodation.

Ecocentric attitude and anthropocentric attitude positively influence intention and willingness to pay more to visit green hotels. One aspect that green hotels need to demonstrate is that protecting the environment is an emergency and necessary for everyone because natural resources are limited, and consumers are abusing natural resources and the environment. Besides, green hotels need to highlight that visiting green hotels is a wise choice since consumers can play an important role in preserving the natural resources and environment through patronising green hotels, since green hotels can provide concrete pro-environmental benefits in helping our planet, such as green management, green facilities, green buildings, and green products and services.

Beyond this study, the concept of green hotels is still new to developing countries' consumers (Wang et al., 2024b). For example, most Chinese generally have only heard about the concept of green hotels; they are not very familiar with the advantages and the operating mechanisms of green hotels (Wang et al., 2022b). Certain specific policies should be implemented by green hotel operators to attract potential consumers and encourage their green participation. For example, consumers may receive a level of tax incentives or rewards, such as discount coupons, without consuming non-durable products or services when they patronise green hotels during their online or offline booking processes.

6.3 Limitations and future directions

First, because of time and cost constraints, this study was proposed as a cross-sectional study, which focuses on a particular phenomenon at a particular time. Hence, a longitudinal study should be considered in the future since the main advantage of the longitudinal study is the capacity it has to study change and development (Saunders et al., 2019). Second, the study scope was limited to three Chinese cities, i.e., Xuzhou, Taiyuan, and Jiaozuo, which is an insufficient representation of the population. The results of this study should be repeated to include other areas in China and expanded to other collectivistic regions and countries, such as South Korea and Malaysia, to validate the accuracy and reliability. Third, the sample of this study was university students, but it is well known that university students cannot represent the overall young population, as this sample ignores the rest of the other young populations, such as the young-working population, which has more financial capability and expenditures. Hence, future research may consider using probability sampling to identify a suitable sampling frame based on research questions and objectives. Meanwhile, although occupying a large portion of the market for hotels (Wang et al., 2024d), the younger generation does not accurately reflect the entire population. Future research should use varied samples to examine the impact of individualism

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and collectivism on green hotel visits in order to confirm the reliability and accuracy of the study's findings. Fourth, although the majority of respondents (i.e., 52.4%) reported that they had visited hotels two to four times in the last year, this study does not set visiting green hotels as a necessary criterion to recruit samples because finding a green hotel in practice is still not easy (Wang et al., 2024c). Future studies should recruit samples who have experienced green hotels to test the accuracy of this study's findings. Furthermore, this study only managed to gather a comparatively small sample size of 296 respondents. According to Hair Jr et al. (2013), researchers should always interpret findings cautiously when dealing with smaller sample sizes. Therefore, future studies should test the proposed model using a larger sample size, as a larger sample would provide a better representation of the population (Wang et al., 2019). In addition, this study uses statistical remedies of controlling for the effects of a single unmeasured latent method factor to eliminate the effects of CMB on the study during statistical processes. However, this technique controls for any systematic variance among the items that are independent of the covariance due to the constructs of interest; it does not permit the researchers to identify the specific cause of the method bias (Podsakoff et al., 2003). Therefore, the reliability and validity of the results should be re-examined in future studies. Last, although intention is a robust predictor of actual purchase behaviour, it is not always equivalent to actual behaviour in marketing and literature. Future studies should investigate consumers' actual green hotel visit behaviours.

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Competing interests: The authors declare that the research was conducted in the absence of any commercial/financial or non-financial relationships that could be constructed as a potential conflict of interest.

Data availability: The data obtained and examined in this study are documented in the paper and provided in the supplemental data file.

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Ethical approval: The procedures used in this study adhered to the ethical standards set out in the Declaration of Helsinki. As this study was not medical research nor considered human experimentation as stated in the Declaration of Helsinki, and because the questionnaire did not adversely affect the mental health of the respondents, ethical approval was required for this study according to the regulations of the authors' institution (Business School Research Ethics Review Committee, Xuzhou University of Technology, (Approval Number: September 16, 2024)). Moreover, by completing the questionnaire, each respondent who was at least 18 years old consented to participate in the research study. The information collected was used exclusively for the study and was treated as strictly confidential and anonymous.

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To whom concerns

Re: Collectivism or individualism: The challenge to predict green hotel selection in modern China

I am pleased to inform you that the above referenced Request for Ethical Approval of Research has been approved on behalf of the University Research Ethics Review Committee of Business School, Xuzhou University of Technology. This approval is in effect for twelve months from the above date. Any changes in the procedures affecting interaction with human subjects should be reported to the University Research Ethics Review Committee of the Business School, Xuzhou University of Technology. Significant changes will require the submission of a revised Request for Ethical Approval of Research. This approval is in effect only while you are a registered Xuzhou University of Technology lecturer/associate lecturer/professor.

Best wishes for success in this research.

Sincerely,

Associate Professor. Zhong-Hua Wang. Vice President

Business School Research Ethics Review Committee

Xuzhou University of Technology

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Informed consent: Informed consent was obtained from all participants prior to their participation in the study. The nature and objectives of the study, together with the participants ability to withdraw at any time, were explained to the participants. The informed consent process was conducted from September 20 to October 31, 2024, concurrently with the questionnaire distribution.

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Xuzhou University of Technology

18 September 2024

To Whom It May Concern

Re: Collectivism or individualism: The challenge to predict green hotel selection in modern China

Section I – Introduction

You are invited to participate in a research study conducted by Lei Wang (Faculty of Hospitality and Tourism) of the Business School at Xuzhou University of Technology. The purpose of the study is to explore how collectivism, individualism, ecocentric attitude, and anthropocentric attitude influence consumers' intentions and willingness to pay more for staying at green hotels. You will be invited to fill out the online survey to give your opinion on what degree of your perception regarding collectivism, individualism, ecocentric attitude, and anthropocentric attitude influence consumers' intentions and willingness to pay more for staying at green hotels. The survey would only take you about 5-10 minutes to complete, and you can choose to terminate the survey at any time without negative consequences. I would like to stress that all information collected will remain strictly confidential and anonymous and was used for research purposes only. Importantly, individual details will not be disclosed or identifiable from this survey.

If you have any questions about the research, please feel free to contact **Dr. Lei Wang (1136603668@qq.com)**. If you have questions about your rights as a research participant, please contact the Business School Research Ethics Review Committee, Xuzhou University of Technology.

I understand the procedures described above and agree to participate in this study (tick box and proceed to Section II to answer the questions).

Ethical Approval Number: (Business School Research Ethics Review Committee, Xuzhou University of Technology (decision of September 2024)).

Sincerely,

Business School
Xuzhou University of Technology
No.2, Lishui Road, 221018, Yunlong District, Xuzhou, Jiangsu, China