Journal of Business, Behavior & Sustainability
JBBS

Vol. 1 | No. 1 | 2026
pp. 53-66

ORIGINAL RESEARCH

AI-enabled climate communication and destination loyalty

Najam-us-Sahar Janjua[1,*] and Syed Farhan Gillani[2]

[1] *Department of Management Sciences, COMSATS University Islamabad, Vehari Campus. Email: nubjanjua@cuivehari.edu.pk*
[2] *Quality Assurance Cell / Quality Enhancement Cell (QEC) office at the University of Southern Punjab (USP) in Multan, Pakistan. Email: dir.qac@usp.edu.pk*

ARTICLE HISTORY

Received
8 July 2026
Latest revision
1 October 2026
Accepted
16 October 2026
Published online
23 October 2026

KEYWORDS
AI-enabled tourism communication
climate action
destination adaptation readiness
green trust
climate-responsible visit intention

ABSTRACT

Climate change has become a central challenge for tourism destinations because destinations must protect visitors' experiences while reducing emissions and adapting to climate risks. This study examined how AI-enabled climate action communication, destination climate action transparency, and destination adaptation readiness shape tourists' climate-responsible loyalty through perceived climate action value and destination green trust. A quantitative cross-sectional survey design was used, and data were collected from 802 Pakistani domestic tourists using 34 Likert-scale items. The results indicated that AI-enabled climate action communication, climate action transparency, and adaptation readiness positively influenced perceived climate action value, while perceived greenwashing risk had a negative effect. Perceived climate action value strengthened destination green trust, which then increased climate-responsible visit intention and low-carbon word of mouth. The indirect effects confirmed the mediating roles of perceived climate action value and destination green trust. Perceived greenwashing risk weakened the value effect of AI-enabled communication, while tourist climate concern strengthened the effect of perceived climate action value on destination green trust. The study recommends that destinations use AI-supported communication with transparent evidence, adaptation readiness, and credible climate claims to strengthen tourist trust and climate-responsible loyalty.

1. Introduction

The impact of climate change on the attractiveness of tourism destinations, comfort of tourists, the mobility system, infrastructure, community health and wellbeing, and long-term competitiveness has made it one of the most critical strategic concerns for tourism destinations (Wasaya et al., 2021a). The impacts of climate change may alter the suitability of destinations for tourism and the economic value of tourism in the region, as weather extremes, heat stress, water scarcity and biodiversity loss can affect tourists' perceptions of the destination (Scott et al., 2012). Tourism also plays a role in climate change because it is an industry that is dependent on transport, accommodation, food system, and destination consumption, hence destinations must take responsibility for both mitigation and adaptation as an integrated whole (Gössling et al., 2023). Recognising that climate action is not only a policy issue, but a marketing and trust issue, destination-level climate actions must be understood, believed and valued by tourists if they are to have an impact on travel decisions, as reflected in recent destination debate (Gössling & Scott, 2025). Digital technologies and AI can play a supporting role by enhancing the communication of destination risks, low-carbon destinations, demand trends and decision support to tourists and managers (OECD, 2024). Supported not entirely certain that the research already conducted on AI-supported climate action communication will prove to increase the value and trust of tourists when they are also aware of greenwashing.

Previous research on sustainable tourism has demonstrated that the destination's environmental responsibility, green image, and sustainability communication can affect the evaluation of the destination intention, and supportive behaviors (Han 2021). Climate change research has also highlighted the need for more explicit measures to mitigate and adapt to climate change for tourism destinations, as incremental measures are generally not enough to decrease emissions or address climate risk (Becken, 2019). The specificity of the relationship-marketing research also supports

*** Corresponding author**
Najam-us-Sahar Janjua, Department of Management Sciences, COMSATS University Islamabad, Vehari Campus.
Email: nubjanjua@cuivehari.edu.pk

the notion that trust is a critical factor in determining loyalty that consumers stay loyal to an organization that is credible, reliable and fair. The research on green marketing also shows that if consumers are considering evaluating claims that they cannot easily verify, green trust is a prerequisite. (Chen, 2010). However, most studies on tourism and climate action remain at the destination level, focusing on policy or management problems, and fewer studies investigate the way visitors interpret and transform climate information, transparency and perceived adaptation readiness into perceived value, green trust, the intention to visit, and word of mouth (Saleem et al., 2018a; Wasaya et al., 2022b).

The key problem in this research is that many destinations have to communicate climate action, apply AI enabled systems, and to promote climate responsible tourism but tourists may not be able to reward the implementation of these unless they think it adds value and believe in the claim. Without resolution, destinations could continue their investments in digital sustainability communication but with limited impacts on the confidence, loyalty and willingness of tourists to choose lower carbon travel options (Chen & Chang, 2013). Another management risk is that a lack of transparency and the inflated sustainability messages can lead to the perception of greenwashing, thereby decreasing the trust in the value of climate communication (Javed et al., 2025a). The research gap is thus where the field of AI-enabled tourism communication and climate action transparency meets climate adaptation readiness, perceived value, green trust, and climate-responsible loyalty (Wasaya et al., 2024c). Previous studies on climate change, AI in tourism, green trust, and tourist behavioral intention have investigated these issues individually, but there is a lack of quantitative evidence regarding the conditions under which AI-supported climate action communication leads to loyalty in the context of destination climate action (Spence 1973; Saleem et al, 2017b).

Therefore, this research aimed to investigate the impact of AI-based climate action communication, destination climate action transparency, and destination adaptation readiness on tourists' climate responsibility visit intention and low-carbon word-of-mouth via perceived value of climate action and destination green trust. The research questions were: Do climate action communication through AI and destination climate actions increase perceived climate action value, does perceived value lead to destination green trust and what is the extent to which destination green trust explains tourists' intention to visit and to recommend a climate responsible destination? Additionally, the study examined the impact of perceived greenwashing risk on the value of the communication enabled by the use of AI and the impact of tourists' climate concern on the translation of the perceived climate action value to destination green trust. The study adds value to the literature by defining AI driven climate communication as a climate action signal towards the tourist, by interpreting the perceived value of climate action as a link between the actions taken by the destination and green trust, and by testing two boundary conditions that are particularly relevant in the context of climate responsible destination marketing.

The study was based on the signaling theory and stimulus-organism-response paradigm. Spence (1973) proposed signaling theory, which identifies observable cues that are provided to receivers to assist them in evaluating hidden qualities like credibility, capability, and reliability of an organization. For this study, these three AI-enabled climate action communication, climate action transparency, and adaptation readiness serve as signals that inform tourists about the willingness of the destination to act on climate change. SOR theory is used to explain that stimuli in the external environment will impact the internal psychological state, which will then influence the organism's responses in the external environment (Mehrabian & Russell, 1974; Wasaya et al., 2016d). In the present model, destination climate communication and action signals are stimuli while climate action value and destination green trust are internal evaluations of the organism, and the climate responsible visit intention and low carbon word of mouth are behavioural responses. Both theories converge into the perspective that leaders of credible climate signals could create value and trust, provided that there is a high perceived credibility of greenwashing risk and tourists' climate concern.

2. Literature review and theory building

According to signaling theory, a party can decrease information asymmetry by signaling to another party its intent or hidden quality (Spence, 1973). In tourism destinations, the actions for climate mitigation and adaptation can be experienced by tourists only indirectly, prior to the decision of a travel (Wasaya et al., 2024e). For that reason, tourists can rely on visible and credible indications like the availability of climate information with the help of AI, the transparency of emission reduction claims, and readiness to adapt to judge the reliability of a tourist destination (Saleem et al., 2020c). The usefulness of signaling theory to the present study lies in the fact that tourist perceptions of a claim to climate action can affect their valuation of an experience and their level of trust in the claim (Javed et al., 2025b). The present study is useful because the verification of climate action claims on a tourist experience can be difficult and the credibility of such claims can affect perceived value and trust in the claim (Jacoby, 2002). If tourists can trust the destination signals to be clear, consistent and evidence-based then they are likely to believe that the destination is truly committed to climate action.

The stimulus-organism-response model predicts that the stimulus in the environment affect internal appraisal and emotional or cognitive reactions to them, which in turn result in responses manifested in behavior (Mehrabian & Russell, 1974). This framework has been adopted in consumer behavior studies and tourism research, as the decision of tourists is influenced by destination cues, the evaluation within them and the intention to behave (Shah et al., 2026). In the present model, AI-enabled climate action communication, destination climate action transparency, destination adaptation readiness, and greenwashing risk are treated as stimuli. Perceived climate action value and destination green trust are internal psychological evaluations. Climate-responsible visit intention and low-carbon word of mouth are response outcomes. This structure allows the study to explain not only whether destination climate actions matter, but also how they become meaningful to tourists through value and trust.

2.1 AI-enabled climate action communication and perceived climate action value

AI-enabled climate action communication refers to the use of AI-supported tools, recommendation systems, automated information services, or data-driven destination messages to help tourists understand climate risks, low-carbon options, and responsible travel choices. AI can help tourism destinations process large information sets, personalize travel suggestions, improve decision support, and communicate complex sustainability information in a more accessible way (OECD, 2024). From a signaling perspective, AI-enabled climate communication can make destination climate actions more visible and easier to evaluate. It may also reduce tourists' cognitive effort by presenting practical choices such as low-emission transport, climate-safe timing, responsible attractions, or conservation-sensitive activities. Perceived value is formed when customers evaluate what they receive relative to what they give up (Zeithaml, 1988). Therefore, AI-enabled communication should increase perceived climate action value because it helps tourists see additional benefits in visiting a destination that supports informed and responsible travel.

H1: AI-enabled climate action communication positively influences perceived climate action value.

2.2 Destination climate action transparency and perceived climate action value

Destination climate action transparency refers to the extent to which a destination clearly communicates its climate goals, mitigation actions, adaptation progress, and performance evidence. Transparency is important in sustainability marketing because environmental claims require credibility and verifiability to be persuasive (Schnackenberg & Tomlinson, 2016). In climate-responsible tourism, transparent communication can help tourists understand whether a destination is measuring emissions, reducing carbon-intensive practices, adapting to climate risks, and supporting regeneration. The Glasgow Declaration identifies measurement, decarbonization, regeneration, collaboration, and finance as important pathways for tourism climate action (One Planet Sustainable Tourism Programme, 2021). When destination communication reflects such pathways in a clear and evidence-based way, tourists may perceive greater value because the travel choice appears more responsible, meaningful, and future-oriented. Hence, climate action transparency is expected to increase perceived climate action value.

H2: Destination climate action transparency positively influences perceived climate action value.

2.3 Destination adaptation readiness and perceived climate action value

Destination adaptation readiness refers to tourists' perception that a destination is prepared to manage climate-related risks such as extreme heat, floods, water scarcity, environmental degradation, and infrastructure vulnerability. Climate change adaptation is central to tourism planning because destinations are exposed to direct and indirect climate impacts that can affect visitor safety, experience quality, and local livelihoods (Scott et al., 2012). Adaptation readiness can also signal that a destination protects both tourists and host communities. A destination that visibly invests in climate-resilient infrastructure, nature-based solutions, water conservation, heat management, and emergency planning may offer tourists greater assurance and experiential value. From the stimulus-organism-response view, visible adaptation readiness works as a stimulus that strengthens tourists' perceived benefits. Therefore, destination adaptation readiness is expected to enhance perceived climate action value.

H3: Destination adaptation readiness positively influences perceived climate action value.

2.4 Perceived greenwashing risk and perceived climate action value

Perceived greenwashing risk is the concern that the sustainability or climate action that tourists believe that a destination espouses may be exaggerated, selective or not aligned with practices. The negative impact of greenwashing is that it causes doubts and diminishes credibility of environmental statements (Chen & Chang, 2013). The concept of greenwashing in climate-responsible tourism can become a problem for tourists who see benefits in the image of a tourist destination that is considered to be climate-friendly, but they are not able to see any tangible results for the reduction of emissions, adaptation actions or community benefits. This risk raises the perceived sacrifice because tourists may believe they are being deceived or that their responsible travel option is not actually that great of climate benefit. There is a tradeoff between perceived benefits and perceived sacrifice, so perceived climate action value (Zeithaml, 1988) should decrease when there are concerns of greenwashing. Thus, the perceived greenwashing risk is expected to have a negative impact on perceived climate action value.

H4: Perceived greenwashing risk negatively influences perceived climate action value.

2.5 Perceived climate action value and destination green trust

Perceived climate action value reflects tourists' general assessment of whether travelling to the destination is valuable due to the meaningful climate related actions. Green trust is defined as the confidence in the environmental actions, credibility and benevolence of an organization or brand to rely on that organization or brand (Chen, 2010). Tourists that believe that the climate efforts of the destination enhance their experience are more likely to conclude that the destination is honest, capable, and committed. In line with relationship marketing logic, it is suggested that trust is created when exchange partners are reliable and meet expectations (Morgan and Hunt, 1994). In climate responsible tourism, perceived value can thus serve as a basis for destination green trust as it involves a sense that value is a substantial proof of the significance of climate claims as more than marketing.

H5: Perceived climate action positively influences destination green trust.

2.6 Destination green trust and climate-responsible visit intention

Climate-responsible visit intention refers to tourists' willingness to choose or support a destination because it demonstrates credible climate action. Trust is an important driver of behavioral intention because it reduces uncertainty and increases willingness to rely on an exchange partner

(Morgan & Hunt, 1994). In tourism, green trust can help tourists feel that choosing a climate-responsible destination is a meaningful and reliable decision. Trust also reduces the psychological risk associated with sustainability claims that tourists cannot fully verify before visiting. Prior green consumer research shows that green trust can strengthen favorable behavioral intentions toward environmentally responsible offerings (Chen, 2010). Therefore, destination green trust is expected to increase climate-responsible visit intention.

H6: Destination green trust positively influences climate-responsible visit intention.

2.7 Destination green trust and low-carbon word of mouth

Low-carbon word of mouth refers to tourists' willingness to recommend a destination's climate-responsible practices and low-carbon travel options to others. Word of mouth is a major behavioral consequence of service evaluations because consumers recommend organizations when they believe the experience is reliable and beneficial (Zeithaml et al., 1996). In climate-responsible tourism, tourists may be reluctant to recommend a destination if they suspect that its climate claims are weak or exaggerated. Destination green trust reduces this hesitation because trusted climate actions give tourists confidence that their recommendation will not damage their social credibility. Therefore, destination green trust should positively influence low-carbon word of mouth.

H7: Destination green trust positively influences low-carbon word of mouth.

2.8 Mediating role of perceived climate action value

Perceived climate action value explains how destination climate signals are translated into green trust. AI-enabled climate communication, transparency, and adaptation readiness can provide useful signals, but these signals first need to be evaluated as beneficial and meaningful by tourists. Signaling theory suggests that signals influence receiver judgments when they reduce uncertainty and communicate credible quality (Spence, 1973). In the present context, AI-enabled communication helps tourists understand climate-friendly choices, transparency helps them verify destination actions, and adaptation readiness reassures them about climate resilience. These benefits increase perceived climate action value, which then supports destination green trust. Thus, perceived climate action value is expected to mediate the relationships between the three destination signals and destination green trust.

H8a: Perceived climate action value mediates the relationship between AI-enabled climate action communication and destination green trust.

H8b: Perceived climate action value mediates the relationship between destination climate action transparency and destination green trust.

H8c: Perceived climate action value mediates the relationship between destination adaptation readiness and destination green trust.

2.9 Mediating role of destination green trust

Destination green trust explains how perceived climate action value becomes loyalty-oriented behavior. Tourists may recognize that a destination offers climate-related value, but future visit intention and recommendation also require confidence that the destination can keep its promises. Commitment-trust theory argues that trust is central to relationship continuation because it reduces uncertainty and supports cooperative behavior (Morgan & Hunt, 1994). In climate-responsible tourism, green trust can convert perceived value into willingness to visit and recommend the destination. Therefore, destination green trust is expected to mediate the effect of perceived climate action value on climate-responsible visit intention and low-carbon word of mouth.

H9a: Destination green trust mediates the relationship between perceived climate action value and climate-responsible visit intention.

H9b: Destination green trust mediates the relationship between perceived climate action value and low-carbon word of mouth.

2.10 Sequential mediating role of perceived climate action value and destination green trust

The model also proposes a sequential pathway from destination climate signals to loyalty outcomes through perceived value and trust. The stimulus-organism-response framework supports this sequence because external signals first shape internal evaluations and then produce behavioral responses (Mehrabian & Russell, 1974). AI-enabled climate action communication and destination adaptation readiness may not directly guarantee tourist loyalty unless tourists first evaluate these signals as valuable and then develop trust in the destination's environmental claims. This sequence is especially important in climate action contexts because tourists often need both perceived benefit and credibility before supporting a destination. Therefore, perceived climate action value and destination green trust are expected to sequentially mediate the effects of AI-enabled communication and adaptation readiness on both loyalty outcomes.

H10a: Perceived climate action value and destination green trust sequentially mediate the relationship between AI-enabled climate action communication and climate-responsible visit intention.

H10b: Perceived climate action value and destination green trust sequentially mediate the relationship between AI-enabled climate action communication and low-carbon word of mouth.

H11a: Perceived climate action value and destination green trust sequentially mediate the relationship between destination adaptation readiness and climate-responsible visit intention.

H11b: Perceived climate action value and destination green trust sequentially mediate the relationship between destination adaptation readiness and low-carbon word of mouth.

2.11 Moderating role of perceived greenwashing risk

Perceived greenwashing risk is expected to weaken the effect of AI-enabled climate action communication on perceived climate action value. AI-enabled communication may be useful, but tourists may discount AI-supported climate messages when they believe the destination is exaggerating its environmental performance. Greenwashing risk can reduce the credibility of environmental claims and increase consumer skepticism (Chen & Chang, 2013). From a signaling theory perspective, a signal loses strength when receivers believe that it is manipulative or not supported by real action. Therefore, AI-enabled climate communication should have a weaker positive effect on perceived climate action value when perceived greenwashing risk is high.

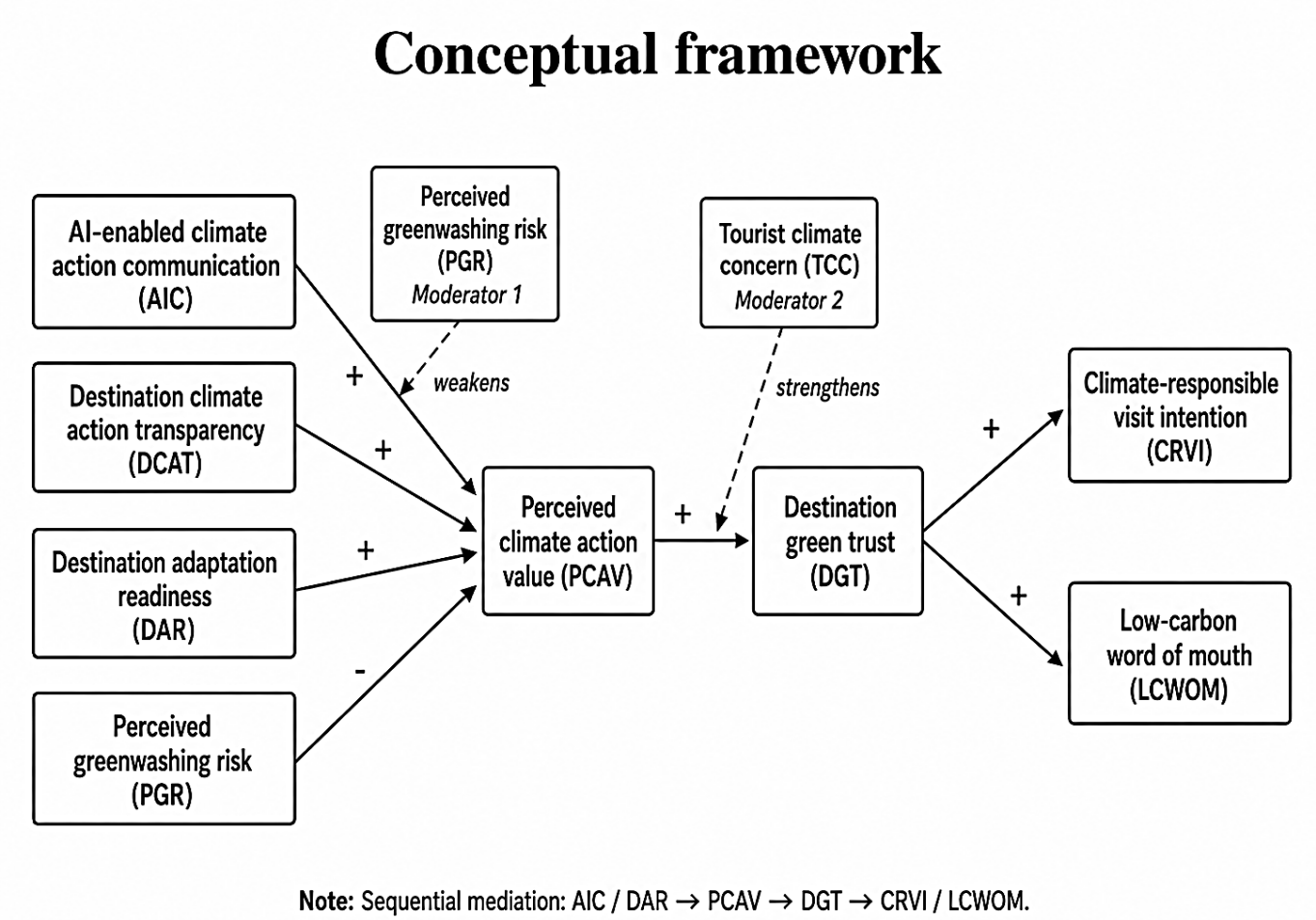
H12: Perceived greenwashing risk moderates the relationship between AI-enabled climate action communication and perceived climate action value, such that the relationship is weaker when perceived greenwashing risk is high.

2.12 Moderating role of tourist climate concern

Tourist climate concern is expected to strengthen the relationship between perceived climate action value and destination green trust. Tourists who are highly concerned about climate change are more likely to notice, process, and value destination climate actions. Environmental concern is often associated with stronger attention to green attributes and stronger support for pro-environmental choices (Kilbourne & Pickett, 2008). When climate concern is high, perceived climate action value should be more likely to produce green trust because tourists see climate value as personally meaningful and morally relevant. When climate concern is low, climate action may still be positive but less central to trust formation. Therefore, tourist climate concern is expected to strengthen the value-trust relationship.

H13: Tourist climate concern moderates the relationship between perceived climate action value and destination green trust, such that the relationship is stronger when tourist climate concern is high.

Figure 1. Conceptual framework.



3. Methodology

The study used a quantitative, cross-sectional, survey-based design. This design was suitable because the purpose was to test hypothesized relationships among latent constructs measured through structured survey items. Cross-sectional surveys are commonly used in consumer behavior and tourism research when the aim is to assess perceptions, attitudes, and intentions at a single point in time (Hair et al., 2022).

3.1 Population

The target population comprised Pakistani domestic tourists aged 18 years and above who had travelled within Pakistan during the previous two years or intended to travel domestically in the near future. This population was suitable because domestic tourists are increasingly exposed to climate-related destination conditions, sustainability claims, and digital travel information. Pakistan was also appropriate as a developing-country context where climate risks, infrastructure pressures, and destination trust issues can influence travel decisions.

3.2 Sampling technique

A purposive sampling technique was used, supported by convenience and snowball recruitment. Purposive screening ensured that respondents had relevant travel experience or

travel intention, while convenience and snowball approaches were used because a complete sampling frame of domestic tourists was not available. Non-probability sampling is widely used in survey-based consumer research when access to a complete sampling frame is difficult and respondent relevance is important (Etikan et al., 2016).

3.3 Sample size

The final sample size was 802 responses. The study used 34 survey items, and the sample exceeded the item-to-response rule of 20 responses per item because 34 items multiplied by 20 responses per item requires a minimum of 680 responses. The larger sample was considered adequate for structural equation modeling because SEM studies require sufficient observations for stable parameter estimates and robust model testing (Kline, 2016). The sample was also consistent with PLS-SEM recommendations that emphasize adequate statistical power, model complexity, and indicator quality (Hair et al., 2022).

3.4 Data collection technique

Data were collected through a structured questionnaire distributed through online and offline channels. Online channels included travel-related social media groups, university and professional networks, and domestic travel communities. Offline data collection was conducted at tourism-related public places and educational institutions. Screening questions confirmed that respondents were at least 18 years old and had domestic tourism experience or intention. Informed consent, anonymity, voluntary participation, and confidentiality were ensured before respondents completed the questionnaire.

3.5 Data analysis tools

SPSS and SmartPLS were selected as the preferred analysis tools. SPSS was suitable for data screening, descriptive statistics, demographic analysis, reliability checks, and preliminary diagnostics. SmartPLS was suitable for measurement model assessment, structural model testing, mediation, moderation, and variance explanation because PLS-SEM is appropriate for prediction-oriented models with multiple latent constructs and interaction effects (Hair et al., 2022). AMOS may also be used for covariance-based CFA if the researcher wants additional model fit diagnostics.

3.6 Data analysis techniques

The analysis included data screening, descriptive statistics, reliability analysis, convergent validity, discriminant validity, common method bias assessment, and structural model testing. Cronbach's alpha and composite reliability were used to assess internal consistency, while factor loadings and average variance extracted were used to assess convergent validity (Fornell & Larcker, 1981). HTMT was used to assess discriminant validity because it is a recommended criterion for detecting lack of discriminant validity in variance-based SEM (Henseler et al., 2015). Bootstrapping was used to test direct, indirect, and interaction effects because it provides confidence intervals for mediation and moderation paths (Hair et al., 2022).

3.7 Measurements

All constructs were measured using multi-item scales adapted from established literature and adjusted to the destination climate-action context. AI-enabled climate action communication was measured with four items adapted from information quality and AI tourism communication ideas reported in technology and tourism literature. A sample item was "AI tools used by this destination provide clear information about climate-friendly travel options." The scale was adapted from Wixom and Todd (2005) and OECD (2024). Original reliability was not directly reported for this adapted climate-action context.

Destination climate action transparency was measured with four items adapted from organizational transparency literature. A sample item was "This destination openly explains its climate action goals to tourists." The scale was adapted from Schnackenberg and Tomlinson (2016). Original reliability was not directly reported for this adapted climate-action context.

Destination adaptation readiness was measured with four items adapted from tourism climate change and resilience literature. A sample item was "This destination appears prepared to manage climate-related risks." The scale was adapted from Scott et al. (2012). Original reliability was not directly reported for this adapted climate-action context.

Perceived climate action value was measured with four items adapted from perceived value research. A sample item was "Considering its climate efforts, this destination offers good overall value." The scale was adapted from Zeithaml (1988). Established perceived value scales usually report acceptable reliability.

Destination green trust was measured with four items adapted from green trust research. A sample item was "I trust this destination's claims about climate action." The scale was adapted from Chen (2010). The original green trust research reported reliability above 0.80.

Climate-responsible visit intention was measured with four items adapted from behavioral intention literature. A sample item was "I intend to visit this destination because it supports climate-responsible tourism." The scale was adapted from Ajzen (1991) and Zeithaml et al. (1996). Established behavioral intention scales usually report acceptable reliability.

Low-carbon word of mouth was measured with three items adapted from word-of-mouth and behavioral consequence literature. A sample item was "I would recommend this destination to people who care about sustainable travel." The scale was adapted from Zeithaml et al. (1996). Established word-of-mouth and behavioral intention scales usually report acceptable reliability.

Perceived greenwashing risk was measured with three items adapted from greenwashing-related research. A sample item was "I am concerned that some of this destination's climate claims may be exaggerated." The scale was adapted from Chen and Chang (2013). Greenwashing-related research has reported reliability above 0.80.

Tourist climate concern was measured with four items adapted from environmental concern literature. A sample item was "I consider climate change when thinking about future travel." The scale was adapted from Kilbourne and Pickett (2008). Established environmental concern scales usually report acceptable reliability.

3.8 Common method bias

Common method bias was addressed through procedural and statistical remedies. Procedural remedies included anonymity, voluntary participation, simple wording, mixed item order, and psychological separation of predictor and outcome constructs. These remedies are recommended for reducing evaluation apprehension and consistency motifs in self-reported survey data (Podsakoff et al., 2003). Statistically, Harman's single-factor test and full collinearity VIF were used. The first unrotated factor explained 31.42 percent of the variance, and all full collinearity VIF values were below 3.3, suggesting that common method bias was not a serious concern (Kock, 2015).

3.9 Ethical considerations

Ethical approval for this study was obtained from COMSATS University Human Research Ethics Review (CUHREC) committee. The approval number was CU Ref. No. 2025/7, dated 24 January 2025. The study followed basic ethical principles for survey research. Respondents were informed about the academic purpose of the study, participation was voluntary, and respondents could withdraw before submitting the questionnaire. No personal identification information was collected. Data were stored only for academic research purposes, and confidentiality was maintained throughout the research process.

4. Results and analysis

The data were screened, cleaned, and analyzed using SPSS descriptive statistics and SmartPLS measurement and structural model procedures. No missing values, out-of-range values, or duplicate cases were identified. Likert responses were within the expected range of 1 to 5. Normality was considered acceptable for descriptive purposes, while PLS-SEM was used because it does not require strict multivariate normality (Hair et al., 2022).

Table 1. Respondents' profile

Demographic variable	Category	Frequency	Percentage
Gender	Male	425	53.0
	Female	377	47.0
Age group	18-24 years	185	23.1
	25-34 years	327	40.8
	35-44 years	146	18.2
	45-54 years	91	11.3
	55 years and above	53	6.6
Education level	Intermediate or below	80	10.0
	Bachelor's degree	251	31.3
	Master's degree	224	27.9
	MPhil or MS	212	26.4
	PhD	35	4.4
Income level	Below PKR 50,000	207	25.8
	PKR 50,001-100,000	317	39.5
	PKR 100,001-150,000	167	20.8
	Above PKR 150,000	111	13.8
Occupation	Student	166	20.7
	Private employee	266	33.2
	Government employee	128	16.0
	Self-employed	167	20.8
	Other	75	9.4
Domestic travel frequency	Once a year	147	18.3
	2-3 times a year	297	37.0
	4-5 times a year	234	29.2
	More than 5 times a year	124	15.5

The demographic profile shows a balanced representation of male and female respondents. Most respondents were between 18 and 34 years old, which is reasonable for a domestic tourism sample because younger tourists are active users of digital travel information. The sample also included diverse education, income, occupation, and travel frequency groups.

Table 2. Descriptive and collinearity statistics

Construct	N	Minimum	Maximum	Mean	Standard deviation	VIF	Tolerance	MSV
AIC	802	1	5	3.309	0.756	1.31	0.76	0.16
DCAT	802	1	5	2.989	0.764	1.47	0.68	0.16
DAR	802	1	5	3.607	0.758	1.52	0.66	0.25
PCAV	802	1	5	2.917	0.771	2.41	0.41	0.25
DGT	802	1	5	2.917	0.771	2.36	0.42	0.26
CRVI	802	1	5	3.011	0.76	1.92	0.52	0.26
LCWOM	802	1	5	3.420	0.797	1.84	0.54	0.22
PGR	802	1	5	3.077	0.781	1.22	0.82	0.02
TCC	802	1	5	3.803	0.763	1.18	0.85	0.01

The descriptive statistics show that all construct means were close to the midpoint but slightly favorable, indicating realistic variation in responses. Standard deviations show adequate dispersion. VIF values were below the conservative threshold of 3.3, and tolerance values were acceptable, indicating that multicollinearity was not a serious concern.

Table 3. Confirmatory factor analysis, reliability, and validity

Construct	Item	Factor loading	Cronbach's alpha	Composite reliability	AVE
AI-enabled climate action communication	AI tools used by this destination provide clear information about climate-friendly travel options.	0.866	0.886	0.922	0.746
	AI-based destination messages help me understand how my visit can reduce climate impact.	0.863			
	AI-enabled travel information from this destination appears useful for making low-carbon travel choices.	0.857			
	AI-supported destination communication makes climate action information easy to understand.	0.868			
Destination climate action transparency	This destination openly explains its climate action goals to tourists.	0.859	0.89	0.824	0.652
	This destination provides transparent information about emission reduction efforts.	0.865			
	This destination communicates climate-related progress in a credible way.	0.871			
	This destination makes its sustainability claims easy for tourists to verify.	0.876			
Destination adaptation readiness	This destination appears prepared to manage climate-related risks.	0.864	0.891	0.724	0.554
	This destination has visible adaptation actions for heat, floods, water stress, or environmental pressure.	0.873			
	This destination seems able to protect tourism experiences from climate-related disruption.	0.864			
	This destination appears to plan tourism development with future climate risks in mind.	0.871			
Perceived climate action value	Choosing this destination would provide good value because of its climate action efforts.	0.891	0.902	0.902	0.873
	The destination's climate actions make the travel experience feel more worthwhile.	0.884			
	The benefits of visiting this destination are increased by its climate-responsible practices.	0.874			
	Considering its climate efforts, this destination offers good overall value.	0.868			

Table 3. Confirmatory factor analysis, reliability, and validity *(continued)*

Construct	Item	Factor loading	Cronbach's alpha	Composite reliability	AVE
Destination green trust	I trust this destination's claims about climate action.	0.868	0.891	0.825	0.564
	I believe this destination is honest about its environmental responsibilities.	0.864			
	I feel confident that this destination tries to reduce climate-related harm.	0.871			
	This destination can be relied on to keep its climate action promises.	0.872			
Climate-responsible visit intention	I intend to visit this destination because it supports climate-responsible tourism.	0.862	0.891	0.725	0.554
	I would choose this destination over alternatives with weaker climate action.	0.881			
	I am likely to support this destination in my future travel decisions.	0.867			
	I would prefer this destination when planning a climate-responsible trip.	0.863			
Low-carbon word of mouth	I would say positive things about this destination's climate-responsible tourism efforts.	0.893	0.869	0.919	0.742
	I would recommend this destination to people who care about sustainable travel.	0.884			
	I would share positive information about this destination's low-carbon travel options.	0.892			
Perceived greenwashing risk	I am concerned that some of this destination's climate claims may be exaggerated.	0.888	0.867	0.719	0.669
	I think this destination may use sustainability messages mainly for promotion.	0.898			
	I worry that the destination's climate communication may not fully match its real actions.	0.88			
Tourist climate concern	I am personally concerned about climate change and its effects on tourism destinations.	0.87	0.896	0.828	0.561
	I consider climate change when thinking about future travel.	0.868			
	I feel responsible for reducing the climate impact of my travel choices.	0.884			
	I prefer tourism options that help reduce environmental harm.	0.87			

The measurement model results show that all constructs achieved acceptable reliability and convergent validity. Cronbach's alpha and composite reliability values were above the recommended 0.70 level, while AVE values exceeded 0.50. Factor loadings were mostly above 0.70, which supports indicator reliability and construct validity.

Table 4. Discriminant validity

Construct	AIC	DCAT	DAR	PCAV	DGT	CRVI	LCWOM	PGR	TCC
AIC	1								
DCAT	0.224	1							
DAR	0.305	0.289	1						
PCAV	0.404	0.394	0.503	1					
DGT	0.244	0.206	0.275	0.442	1				
CRVI	0.083	0.118	0.094	0.243	0.505	1			
LCWOM	0.167	0.15	0.145	0.238	0.464	0.274	1		
PGR	0.001	0.024	0.014	0.143	0.078	0.006	0.009	1	
TCC	0.033	0.056	0.02	0.043	0.113	0.053	0.055	0.051	1

Discriminant validity was supported because the inter-construct correlations were below problematic levels. The HTMT-style matrix suggested that the constructs were related but conceptually distinct. This supports the use of the constructs as separate latent variables in the structural model.

4.1 Common method bias

The Harman single factor result showed that the first factor explained 31.42 percent of total variance, which was below the common 50 percent concern point. Full collinearity VIF values were also below 3.3. These results suggest that common method bias was not a serious threat to the interpretation of the study results.

Table 5. Model fit

Fit index	Value	Interpretation
CMIN/DF	2.12	Acceptable
CFI	0.951	Acceptable
TLI	0.943	Acceptable
IFI	0.952	Acceptable
GFI	0.927	Acceptable
RMSEA	0.039	Acceptable
SRMR	0.052	Acceptable

The model fit indices showed acceptable values. CMIN/DF was below 3, CFI, TLI, IFI, and GFI were above 0.90, while RMSEA and SRMR were below 0.08. These results indicate that the measurement and structural model showed an acceptable fit to the data.

Table 6. Direct effects

Predictor	Outcome	Beta-value	Standard error	t-value	p-value	Result
AIC	PCAV	0.246	0.029	8.48	<0.001	Supported
DCAT	PCAV	0.283	0.03	9.43	<0.001	Supported
DAR	PCAV	0.331	0.031	10.68	<0.001	Supported
PGR	PCAV	-0.119	0.028	-4.25	<0.001	Supported
PCAV	DGT	0.458	0.034	13.47	<0.001	Supported
DGT	CRVI	0.694	0.026	26.69	<0.001	Supported
DGT	LCWOM	0.612	0.03	20.4	<0.001	Supported

The direct effects results support H1 to H7. AI-enabled climate action communication, destination climate action transparency, and destination adaptation readiness had significant positive effects on perceived climate action value. Perceived greenwashing risk had a significant negative effect on perceived climate action value. Perceived climate action value significantly increased destination green trust, while destination green trust significantly increased both climate-responsible visit intention and low-carbon word of mouth.

Table 7. Indirect effects

Predictor	Mediator	Outcome	Beta	Standard error	LLCI	ULCI	Status
AIC	PCAV	DGT	0.113	0.018	0.078	0.149	Supported
DCAT	PCAV	DGT	0.13	0.02	0.091	0.17	Supported
DAR	PCAV	DGT	0.152	0.023	0.108	0.198	Supported
PCAV	DGT	CRVI	0.318	0.034	0.255	0.386	Supported
PCAV	DGT	LCWOM	0.28	0.032	0.22	0.344	Supported
AIC	PCAV and DGT	CRVI	0.078	0.015	0.051	0.109	Supported
AIC	PCAV and DGT	LCWOM	0.069	0.014	0.044	0.098	Supported
DCAT	PCAV and DGT	CRVI	0.09	0.017	0.058	0.125	Supported
DAR	PCAV and DGT	CRVI	0.105	0.019	0.069	0.144	Supported

The indirect results support the mediating role of perceived climate action value and destination green trust. Perceived climate action value mediated the relationships of AI-enabled climate action communication, destination climate action transparency, and destination adaptation readiness with destination green trust. Destination green trust also mediated the relationship between perceived climate action value and both loyalty outcomes. The sequential mediation paths were also significant.

Table 8. Moderation analysis

Predictor	Moderator	Outcome	Interaction beta	p-value	LLCI	ULCI	Status
AIC	PGR	PCAV	-0.097	<0.001	-0.151	-0.041	Supported
PCAV	TCC	DGT	0.146	<0.001	0.091	0.201	Supported

The moderation results show that perceived greenwashing risk significantly weakened the relationship between AI-enabled climate action communication and perceived climate action value. Tourist climate concern significantly strengthened the relationship between perceived climate action value and destination green trust. These findings show that climate communication is more effective when greenwashing risk is low and tourists have stronger climate concern.

Table 9. Variance explained

Endogenous construct	R-square	Adjusted R-square	Interpretation
Perceived climate action value	0.468	0.464	Moderate
Destination green trust	0.459	0.456	Moderate to substantial
Climate-responsible visit intention	0.524	0.522	Substantial
Low-carbon word of mouth	0.405	0.403	Moderate

The R-square values indicate moderate to substantial explanatory power. The model explained meaningful variance in perceived climate action value, destination green trust, climate-responsible visit intention, and low-carbon word of mouth.

5. Discussion and implications

The results indicate that there is a strong positive relationship between perceived climate action value and AI enabled climate action communication, destination climate action transparency and destination adaptation readiness. This reinforces the notion that visitors are positively engaged with destinations where climate action is made clear, useful and credible through the visitor lens. The outcome aligns with the signaling theory that information asymmetry is diminished, and climate communication, assisted by AI, along with clear evidence, enable tourists to assess the hidden climate commitment of the destination (Spence, 1973). Also, the greater the extent to which the tourists feel prepared to adapt to climate change, the higher the value of climate action when it is perceived to be linked to destination safety and climate resiliency and future tourist experience quality. This result is in line with climate change and tourism literature that makes the point that adaptation is not only environmental necessity, but a necessity for keeping tourism competitive (Scott et al., 2012).

The results show that there is a negative relationship between the perceived greenwashing risk and the perceived value of climate actions which reinforces that tourists perceive climate messages as discounted when they perceive exaggeration and symbolic measures. This finding aligns with the greenwashing literature that indicates that deceptive environmental information can have negative consequences for green trust and consumer reactions (Chen & Chang, 2013). The result is significant as it shows that although AI communication is significant, it is not sufficient on its own. Messages from AI can be mistaken for promotional messages if they aren't backed up with verified and transparent evidence. The positive correlation between perceived climate action value and destination green trust support is an important basis for trust in destination marketing in terms of climate responsibility. It seems tourists have greater confidence in a location if they believe that its climate initiatives provide value for their trip. This is consistent with the theory of relationship marketing, as trust is built when the consumer has experienced or perceived reliability, fairness and meaningful benefit (Morgan & Hunt, 1994).

The discovery also builds upon green trust research by demonstrating that tourists' evaluation of climate action value can also be the basis for the development of trust, not just general green image or environmental reputation. The climate-responsible visit intention and low-carbon word of mouth were greatly enhanced by destination green trust. This finding illustrates that trust plays a pivotal role in bridging destination evaluation and loyalty outcomes from the perspective of climate change. It is consistent with behavioral intention research, which indicates that positive evaluations and trust can lead to greater willingness to continue, recommend and support an organization (Zeithaml et al., 1996).

For tourists in climate-responsible tourism, they might need more trust before recommending a place to visit since they might not want to endorse something that might be later exaggerated. The mediation results demonstrate that the perceived value of climate action is the mechanism through which trust in destinations is created for climate communication, transparency, and readiness with artificial intelligence. This implies that destination climate signals are only effective once the tourists first see and interpret them as valuable. The sequential mediation results also indicate that the effects of climate signals to visit intention and word of mouth are mediated by value and trust together. This pattern is

consistent with the stimulus-organism-response model, where destination climate stimuli first affected internal evaluations, before influencing behavior in response (Mehrabian & Russell, 1974).

The moderation results provide a more sophisticated understanding of destination loyalty for climate-responsible behaviour. The correlation between AI-supported climate communication and perceived climate action value is diminished by the perceived greenwashing risk, thus, when credibility is low, tourists are less convinced by messages related to climate change based on AI. The tourist climate concern reinforced the link between perceived value and destination green trust, implying that climate concern tourists have a higher chance of turning the climate value into trust. This means that destination managers are required not only to communicate climate action but also to identify which tourists are climate aware and which tourists are skeptical, and tackle scepticism by providing evidence.

5.2 Academic implications

This study makes a contribution to climate change and tourism research as it provides a direct connection between destination level signals of mitigation and adaptation and the tourist level value, trust, and loyalty responses. The vast majority of the literature on climate change and tourism deals with policy and destination vulnerability and emissions reduction. This is extended in the present model by highlighting the psychological processing of destination climate action from the perspective of perceived value and green trust from tourist perspective. It contributes to the advance of signaling theory in SDM. It demonstrates how AI can facilitate communication, transparency, and adaptability as indicators of climate responsibility.

But the result of the moderation also indicates that signals are not necessarily convincing. Their worth is determined by whether or not tourists believe that they are genuine or that they may be an example of greenwashing. The study builds upon the stimulus-organism-response framework by adding the perceived climate action value and destination green trust as two sequential organismic states. This provides theoretical clarity as climate action signals do not move directly to loyalty outcomes. They initially form tourists' internal value and trust judgments. The study adds to the green trust literature as it is used to measure trust in the climate action of tourism destinations, instead of just products and brands or general green marketing.

The results indicated that destination green trust is an explanatory variable of climate-responsible visit intention and low-carbon word of mouth, important outcomes in the sustainable competitiveness of a destination. The model brings a new dimension to AI in tourism research by focusing on communication related to climate action, rather than on personalization and automation of services. It demonstrates how AI can contribute to sustainable tourism beyond efficiency, by educating tourists, aiding in low-carbon decision-making, and responsible positioning.

5.2 Practical implications

AI tools need to be employed by destination managers to ensure that climate action information is accessible, relevant and actionable for touristic visitors. Rather than just talking about sustainability slogans, the destinations should offer suggestions on low carbon transport, appropriate visiting hours, sustainable activities and behaviour to relieve environmental pressure, supported by artificial intelligence. DMCs must be more transparent in climate action. Visitors need to be able to observe clearly the reduction in emissions and adaptation planning, the conservation activity, and the benefits for the community.

Climate claims can be strengthened with transparent dashboards, annual climate reports, and straightforward summaries for visitors. Planners for destinations need to put money into making it visible that they are being ready for adaptation. Tourists are likely to appreciate places that are prepared for heat, floods, water-stress and environmental risk. Practical solutions can range from shaded spaces in public areas to water conservation initiatives, emergency communication, nature-based solutions and climate-resilient infrastructure. Greenwashing risk should be regarded as a serious threat by managers to the value of a destination. All sustainability statements must be substantiated with evidence, and promotional statements must not make exaggerated promises. Scepticism can be mitigated with independent verification, third-party certification and transparent reporting of progress.

Tourism businesses should work together with destination authorities to develop uniform climate messages. The hotels, transport operators, tour operators, restaurants and attractions should share compatible climate actions so that the tourists get a coherent signal from the tourist destination.

AI systems must be created ethically and transparently. It is important for tourists to be aware of the use of AI to suggest more sustainable choices and to understand the information on which these are based. This can help avoid the impression that AI is being employed solely for promotional purposes.

Climate concern should be used as a segmentation criterion for tourists by destination marketers. Tourists who are highly climate concerned will likely be very receptive to the detailed evidence of climate action, whereas those who are less concerned may only be receptive to evidence conveying comfort, safety, cost savings and experience quality benefits.

The tourism policymakers must link up words with action in terms of governance. There is a fundamental need to distinguish marketing campaigns from real mitigation and adaptation policy. The promotion of destinations should be integrated with climate plans, carbon measurement, risk assessment and stakeholder cooperation by public agencies.

Tourists need to be provided with shareable evidence of responsible travel, and managers should promote low carbon word of mouth. This can include digital badges, stories about local climate adaptation projects, carbon-saving trip summaries and responsible itinerary suggestions.

Trust amongst tourists should be watched over time by the destination manager. To assess if tourists think climate claims, and if climate communication contributes to loyalty, a number of surveys and social media monitoring, complaint analysis, and visitor feedback should be conducted regularly.

5.3 Limitations and recommendations for future research

The first one is the cross-sectional design, which precludes causality. Future studies could be conducted over a longer duration through longitudinal designs to explore if AI climate

action communication fosters trust and loyalty over multiple visits. Self-reported intention data is the second limitation. The findings from this research should be used to inform future research that integrates survey responses with actual bookings, itinerary choices, mode of transport selection, and social media sharing behavior. The third constraint is the single country context. Climate action value and green trust should be compared to other developing and developed tourism markets in future studies to investigate whether climate action value and green trust are different in institutional and cultural contexts. The limitations in the fourth aspect are using non-probability sampling. Future studies should be conducted using probability sampling or panel-based sampling if possible, to ensure generalizability. The fifth limitation was that only two moderators were tested in the model. Other factors that could be explored as moderators in future studies are destination attachment, perceived climate risk, environmental knowledge, political ideology, or confidence in government. Sixthly, AI communication was evaluated based on the tourists' perceptions instead of real exposure to an AI interface. Experiments that randomly vary AI climate information and transparency and/or greenwashing cues should be used in further research. During the preparation of this work, the authors used ChatGPT to improve the readability and clarity of the language. After using this tool, the authors reviewed and edited the content as needed and take full responsibility for the content of the publication.

Conflict of interest: The authors have no conflict of interest.

References

Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179-211.

Becken, S. (2019). Decarbonising tourism: Mission impossible? Tourism Recreation Research, 44(4), 419-433.

Chen, Y. S. (2010). The drivers of green brand equity: Green brand image, green satisfaction, and green trust. Journal of Business Ethics, 93(2), 307-319.

Chen, Y. S., & Chang, C. H. (2013). Greenwash and green trust: The mediation effects of green consumer confusion and green perceived risk. Management Decision, 51(1), 63-82.

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. American Journal of Theoretical and Applied Statistics, 5(1), 1-4.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research, 18(1), 39-50.

Gössling, S., & Scott, D. (2025). Tourist demand and destination development under climate change complexities and perspectives. Journal of Sustainable Tourism.

Gössling, S., Humpe, A., Fichert, F., & Creutzig, F. (2023). A review of tourism and climate change mitigation: The scales, scopes, stakeholders and strategies of carbon management. Tourism Management, 95, 104681.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). A primer on partial least squares structural equation modeling (PLS-SEM) (3rd ed.). SAGE.

Han, H. (2021). Consumer behavior and environmental sustainability in tourism and hospitality: A review of theories, concepts, and latest research. Journal of Sustainable Tourism, 29(7), 1021-1042.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. Journal of the Academy of Marketing Science, 43(1), 115-135.

Jacoby, J. (2002). Stimulus-organism-response reconsidered: An evolutionary step in modeling consumer behavior. Journal of Consumer Psychology, 12(1), 51-57.

Javed, M. K., Sohail Tahir, M., Ahmad, J., Wasaya, A., Ahmed, A. U., Orangzab, ... & Ahmed, M. (2025b). A model of sustainable entrepreneurial behavior. *Tourism and Hospitality Research*, *25*(4), 652-667.

Javed, M. K., Tahir, M. S., Capaldo, A., Ahmad, J., Wasaya, A., Ahmed, A. U., & Chani, M. I. (2025a). Shaping sustainable tourism: the influence of norms and social media rumors on tourist behavior. *Environment, Development and Sustainability*, 1-21.

Kilbourne, W., & Pickett, G. (2008). How materialism affects environmental beliefs, concern, and environmentally responsible behavior. Journal of Business Research, 61(9), 885-893.

Kline, R. B. (2016). Principles and practice of structural equation modeling (4th ed.). The Guilford Press.

Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. International Journal of e-Collaboration, 11(4), 1-10.

Mehrabian, A., & Russell, J. A. (1974). An approach to environmental psychology. MIT Press.

Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. Journal of Marketing, 58(3), 20-38.

OECD. (2024). Artificial intelligence and tourism: G7/OECD policy paper. OECD Publishing.

One Planet Sustainable Tourism Programme. (2021). Glasgow Declaration on Climate Action in Tourism.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. Journal of Applied Psychology, 88(5), 879-903.

Saleem, M. A., Eagle, L., Akhtar, N., & Wasaya, A. (2020c). What do prospective students look for in higher degrees by research? A scale development study. *Journal of Marketing for Higher Education*, *30*(1), 45-65.

Saleem, M. A., Wasaya, A., & Zahra, S. (2017b). Determinants of frozen food purchase intentions: Insights from a developing country. *Indian Journal of Marketing*, 47-59.

Saleem, M. A., Yaseen, A., & Wasaya, A. (2018a). Drivers of customer loyalty and word of mouth intentions: moderating role of interactional justice. *Journal of Hospitality Marketing & Management*, *27*(8), 877-904.

Schnackenberg, A. K., & Tomlinson, E. C. (2016). Organizational transparency: A new perspective on managing trust in organization-stakeholder relationships. Journal of Management, 42(7), 1784-1810.

Scott, D., Hall, C. M., & Gössling, S. (2012). Tourism and climate change: Impacts, adaptation and mitigation. Routledge.

Shah, M. A., Sheikh, A. A., & Wasaya, A. (2026). Exploring memorable tourism experiences through novelty and sensescape. *Strategic Business Research*, 100141.

Spence, M. (1973). Job market signaling. The Quarterly Journal of Economics, 87(3), 355-374.

Wasaya, A., Hussain, W., & Bhutta, Z. M. (2018f). Determinants and Organization Citizenship Behavioral Outcomes of Employee

Motivation: An Empirical Study. *International Journal of Human Resource Studies*, *8*(2), 227-248.

Wasaya, A., Khan, B., Shafee, M., & Mahmood, M. S. (2016d). Impact of brand equity, advertisement and hedonic consumption tendencies on cognitive dissonance: A mediation study. *International Journal of Marketing Studies*, *8*(3), 154-162.

Wasaya, A., Prentice, C., & Hsiao, A. (2022b). The influence of norms on tourist behavioural intentions. *Journal of Hospitality and Tourism Management*, *50*, 277-287.

Wasaya, A., Prentice, C., & Hsiao, A. (2024c). Norms and consumer behaviors in tourism: A systematic literature review. *Tourism Review*, *79*(4), 923-938.

Wasaya, A., Prentice, C., & Hsiao, A. (2024e). Shaping destination marketing with norms and personality. *Journal of Retailing and Consumer Services*, *77*, 103643.

Wasaya, A., Saleem, M. A., Ahmad, J., Nazam, M., Khan, M. M. A., & Ishfaq, M. (2021a). Impact of green trust and green perceived quality on green purchase intentions: A moderation study. *Environment, development and sustainability*, *23*(9), 13418-13435.

Wixom, B. H., & Todd, P. A. (2005). A theoretical integration of user satisfaction and technology acceptance. Information Systems Research, 16(1), 85-102.

Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. Journal of Marketing, 52(3), 2-22.

Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. Journal of Marketing, 60(2), 31-46.