Research Square

Preprints are preliminary reports that have not undergone peer review.
They should not be considered conclusive, used to inform clinical practice,
or referenced by the media as validated information.

The Role of KOL Attractiveness in Shaping Green Purchase Intention Through Trust and Green Advertising Skepticism

Nga Quynh Thi Pham

phamnga@ufm.edu.vn

University of Finance - Marketing

Nhu Thuc Tran Le

University of Finance - Marketing

Kien Trung Tran

University of Finance - Marketing

Research Article

Keywords: Attractiveness, Trustworthiness, Green trust, Green advertising skepticism, Green purchase intention

Posted Date: July 14th, 2026

DOI: https://doi.org/10.21203/rs.3.rs-10009619/v1

License: This work is licensed under a Creative Commons Attribution 4.0 International License.
Read Full License

Additional Declarations: No competing interests reported.

Version of Record: A version of this preprint was published at Discover Sustainability on October 24th, 2026. See the published version at https://doi.org/10.1007/s43621-026-05073-w.

Abstract

Key Opinion Leaders (KOLs) on social media are playing an increasingly vital role in shaping green purchase intention. However, the moderating effect of green advertising skepticism on the relationship between trust and behavioral intention remains unclear in digital media. This study builds a model based on the integration of Social Cognition Theory and Behavioral Reasoning Theory to examine the mechanism by which KOL characteristics influence green product purchase intentions through trustworthiness and green trust, and to assess the role of green advertising skepticism in these relationships. This study uses convenient sampling to reach 300 Vietnamese consumers who have experience purchasing green products and regularly follow KOLs. The results show that the attractiveness of KOLs has a positive impact on trustworthiness and green trust, thereby promoting green purchase intention. Specifically, both trustworthiness and green trust have a positive impact on intention. Notably, skepticism about green advertising did not alter the impact of trustworthiness, but significantly diminished the influence of green trust as the level of skepticism increased. This finding suggests that trust in information sources and trust in products operate through different cognitive mechanisms. This study expands the explanatory power of behavioral reasoning theory in the context of digital media, while also providing practical implications for businesses in selecting KOLs, designing transparent green messaging, and effectively managing consumer skepticism.

1 Introduction

Economic development is one of the top priorities on national development goals, especially in emerging economies [1]. However, pursuing rapid growth with high industrialization intensity has led to many environmental and social consequences, such as air pollution, forest resource depletion, and increased material consumption [2]. In Vietnam, this cycle is becoming increasingly clear as the country maintains an impressive GDP growth rate while also being among the countries with the best air quality in the world. According to [3], the average PM2.5 dust concentration in 2024 is 28.7 μg/m³, 5–7 times higher than the WHO recommendation. On the other hand, according to UNOCHA, Vietnam will lose about 183,000 hectares of tree cover in 2024 [4]. These figures suggest that the demand for green consumption should be considered a crucial lever to balance the goals of economic growth and environmental protection.

Within the limited public resources, adjusting consumer behavior, especially among young people, becomes a viable approach [5]. Although environmental awareness is increasing, green purchase intentions and behaviors are still not commensurate. This gap raises the important question of what factors can transform environmental awareness into green purchase intention (GPI) in digital media.

The explosion of social media has made key opinion leaders (KOLs) a major source of information influencing consumer behavior [6]. In Vietnam, the high level of social media use and strong community culture make KOLs central in influencing consumer decision-making [7]. However, the increase in deceptive advertising and greenwashing also increases skepticism towards green messages. Therefore,

KOLs are both a driving force and a potential source of eroding trust [8]. This raises the need to clarify the mechanism by which the characteristics of KOLs, especially KOL attractiveness and KOL trustworthiness, impact green trust and GPI. The reason for focusing on these two characteristics is that they are perceptual external signals that have a strong influence in the context of information asymmetry such as green consumption. Meanwhile, expertise is often difficult to assess the actual level of expertise of KOLs [8]. Instead, individuals tend to rely on more recognizable signals such as attractiveness and trustworthiness to form green trust and GPI [9].

Previous studies have confirmed that green trust is a key factor in converting green messages into purchase intentions [10, 11]. When consumers believe that brands and products are truly environmentally friendly, they tend to accept risks, are willing to pay higher prices, and maintain long-term green purchasing behavior [12, 13]. Green trust often acts as a mediator between marketing elements such as green value, green label, green promotion, and GPI, while weakening the negative impact of green advertising skepticism [14]. In Vietnam, where environmental information asymmetry is still significant, green trust is even more important because consumers find it difficult to verify green claims themselves, forcing them to rely on signals from brands and social reference sources such as KOLs [15]. However, existing studies mainly consider green trust from the perspective of businesses or traditional marketing elements, paying little attention to the specific role of KOLs in forming green trust and GPI [16, 17, 18]. This gap is particularly important regarding green products, which are difficult to verify, forcing consumers to rely on alternative social signals.

From a theoretical perspective, Social Cognitive Theory (SCT) and Behavioral Response Theory (BRT) provide two complementary platforms to explain the role of KOLs in green consumption. SCT emphasizes that individual behavior is formed through social learning and observing others [14, 19]. Today, KOLs become role models that help consumers learn, evaluate expected outcomes, and adjust their beliefs about green products [20]. BRT, on the other hand, focuses on how individuals make behavioral responses to marketing stimuli based on reasons for and reasons against [21]. Accordingly, green trust is a core form of reason for believing that if consumers believe the green message conveyed by KOLs is authentic, they are more likely to respond by increasing GPI instead of being indifferent or rejecting it [22]. However, there is still a lack of integrated empirical models of SCT and BRT to fully explain how KOL attractiveness and KOL trustworthiness impact green trust, and through that to GPI, while also considering the moderating role of green advertising skepticism.

To address the aforementioned gaps and explain how KOL characteristics interact with consumers' environmental beliefs to shape the GPI in Vietnam, this study answers the following three research questions:

RQ1 How does KOL attractiveness influence green trust through attention and information processing mechanisms?

RQ2 How does KOL trustworthiness impact the GPI?

RQ3 How does green advertising skepticism regulate these relationships?

Answering these questions complements the SCT and BRT theories in the digital communication, and provides practical implications for businesses and policymakers in designing effective green communication campaigns, limiting the risk of greenwashing and leveraging the positive influence of KOLs on sustainable consumption [23, 24].

By integrating SCT and BRT to develop a model explaining GPI through a chain of effects. Simultaneously, the study assesses the moderating role of green advertising skepticism. Based on a survey of young Vietnamese consumers, a group with high social media usage and sensitivity to green trends, the study aims to clarify the mechanisms by which KOLs influence GPI, thereby contributing further evidence to the research stream on green consumption in developing economies. The following sections present a literature review and hypothesis development. This is followed by the research methodology and data analysis results. Finally, there is a discussion, managerial implications, limitations, and suggestions for future research.

2 Literature review

2.1 Green purchase intention

GPI reflects the extent to which consumers are willing to choose environmentally friendly products. This concept is developed from planned behavior theory, in which intention is considered a direct predictor of actual behavior [11, 25]. In terms of sustainable consumption, GPI not only expresses the desire to buy a product but also reflects the consumer's environmental value orientation [13, 15].

Studies show that GPI is formed through a cognitive evaluation process, in which consumers weigh personal benefits against environmental responsibility. Belief in the greenness of a product plays a crucial role in driving purchase intention, while personal awareness and attitudes influence how consumers make decisions [12, 26].

However, between intention and behavior still exists a gap due to barriers such as price, convenience, and the level of trust in environmental information [27, 28]. In the context of digital media, information sources such as KOLs and social networks increasingly influence perceptions and beliefs, thereby impacting GPI [24]. GPI is not only a behavioral intention but also reflects consumers' environmental value orientation, distinct from ordinary consumer decisions.

2.2 Social cognitive theory

SCT explains human behavior through the interaction between individual perceptions and the social environment [14, 19]. According to SCT, behavior is not formed passively but is the result of the individual's process of observing, receiving, and processing information from the environment [29]. The two core cognitive elements in SCT are belief in self-efficacy and outcome expectations, where self-efficacy reflects the ability to perform the behavior, and outcome expectations represent the prediction

of the outcome of the behavior [30]. When these elements are positive, the ability to perform the behavior will be higher [31, 32].

In green consumption, SCT explains that purchase intentions are formed from a combination of individual perceptions and social influence. Studies show that belief in green information and the impact of the social environment can promote sustainable consumption behavior [5, 15]. In the digital environment, KOLs are an important source of influence, helping consumers observe and learn behavior [33]. Therefore, KOL attractiveness represents awareness, credibility represents social influence, and green trust and green skepticism reflect the information evaluation process.

2.3 Behavioral reasoning theory

BRT was developed by Westaby [34] to explain how cognitive reasoning processes shape human intentions and behavior. According to BRT, behavior is not only influenced by general attitudes or beliefs but is also determined by specific reasons that individuals use to justify their choices [34]. These reasons act as a link between personal values, beliefs and behavioral intentions [13].

In BRT, the decision-making process involves two groups of reasons: reasons for and reasons against. Reasons for promote the intention to perform the behavior, while reasons against can reduce or hinder the intention [34]. These two groups of reasons interact with each other in the process of individuals evaluating information and making decisions, making behavior the result of weighing positive and negative factors [15].

In addition, BRT helps explain how consumers weigh environmental benefits against skepticism about product information. Studies show that consumers are often both attracted to green value and tend to be skeptical, especially in the context of unclear information [35, 36]. Therefore, BRT provides a suitable theoretical framework to explain green consumer behavior, as consumers simultaneously weigh motivation and skepticism in the decision-making process.

2.4 The integration of SCT and BRT

Both SCT and BRT approach human behavior from a perspective that emphasizes the role of cognitive processes. Both theories suggest that individuals do not passively react to the environment but actively receive, interpret, and evaluate information before taking action [34, 37]. The core similarity lies in viewing behavior as the result of the interaction between individual cognition and social context [19, 38]. Therefore, integrating SCT and BRT helps to explain green consumer behavior more comprehensively.

SCT is widely used to explain how cognitive and social environmental factors influence behavior. SCT mainly focuses on the mechanism of social learning and has not clarified the intrinsic reasoning process when individuals make decisions [14, 19]. Specifically, although SCT explains well how consumers form perceptions through observing KOLs, this theory has not fully explained why those perceptions are transformed into specific behavioral intentions. Meanwhile, BRT provides an additional perspective by emphasizing the role of contextual reasons in the decision-making process [34]. According to BRT,

behavior is not only dependent on perception but is also shaped by the justifications and justifications that individuals use to justify their actions [11]. This helps to better explain the reasoning process in complex contexts such as green consumption [39]. This is a context where consumers are both attracted by environmental value and skeptical about the authenticity of green information [22, 36].

2.5 Hypothesis development

2.5.1 The relationship between KOLs attractiveness and KOLs trustworthiness

KOL attractiveness is an important factor influencing how consumers assess the credibility of information sources. According to research on celebrity credibility, attractiveness helps create a first impression and guides how consumers receive messages [40]. When consumers feel that the KOLshas similarities or creates a positive impression, they tend to evaluate information more favorably and increase trust in the information source [24, 33]. Instead of just a formality, KOL attractiveness acts as a cognitive mechanism that simplifies the process of evaluating information in the digital environment.

From a SCT perspective, consumers tend to observe and learn from KOLs they find attractive, thereby forming positive perceptions of both the KOL and the content they convey [9, 37]. According to BRT, KOL attractiveness can be seen as an initial reason for, helping consumers justify trusting KOLs in a complex information environment [34]. Empirical evidence also reinforces that the high level of KOL attractiveness is directly proportional to the trust from followers [6, 41]. Therefore, KOL attractiveness directly contributes to the formation of KOL trustworthiness in consumer perception.

H1

KOL attractiveness has a positive impact on KOL trustworthiness.

2.5.2 The relationship between KOLs attractiveness and green trust

KOL attractiveness can influence green trust through how consumers receive and evaluate environmental messages. When KOLs create empathy and closeness, consumers tend to form positive emotional responses, thereby reducing skepticism and increasing acceptance of green information [42, 43]. In the context of difficult-to-verify environmental information, consumers often rely on signals from media sources to infer the credibility of the message [15, 44].

According to SCT, consumers tend to learn from KOLs they like, especially when KOLs demonstrate environmentally friendly lifestyles, thereby forming positive perceptions of green information [23, 31]. According to BRT, KOL attractiveness can be seen as a reason for, helping consumers justify trusting environmental claims in the context of green bleaching [34]. Therefore, when KOLs are attractive, consumers tend to form stronger green trust.

H2

KOL attractiveness has a positive impact on green trust.

2.5.3 The relationship between KOLs trustworthiness, green trust and green purchase intention

With green products, consumers often face a high level of perceived risk due to the difficulty in verifying the authenticity of environmental claims. Therefore, they tend to rely on the reliability of the information source to make decisions [6, 24]. According to SCT, when the information source is considered trustworthy, consumers will reduce skepticism and increase the level of acceptance of the message [45]. From a BRT perspective, KOL trustworthiness acts as a direct reason for, helping consumers justify their purchase decisions under conditions of information uncertainty [21, 34].

In green consumption, KOL trustworthiness is particularly important in reducing concerns about green boycotting and enhancing the perception of the authenticity of the message [46, 47]. When consumers believe that reviews from KOLs stem from real-life experiences rather than commercial motives, they will form stronger trust in the product, thereby boosting purchase intention [24, 48].

H3

KOLs trustworthiness has a positive impact on green purchase intention.

Green trust reflects the degree to which consumers believe that a product is truly environmentally friendly and worth choosing [10]. As this level of trust increases, consumers will tend to choose that product more often. According to BRT, green trust acts as a direct reason for driving behavior. When consumers believe in the environmental value of a product, they will easily translate that belief into purchase intention through cognitive justification [21, 24]. According to SCT, perceptions formed from the social environment can lead to behavior through personal beliefs [14]. Therefore, green trust acts as a bridge between social influence and behavioral intention.

H4

Green trust has a positive impact on green purchase intention.

2.5.4 The relationship between green advertising skepticism, KOLs trustworthiness and green trust

Green advertising skepticism is increasing due to the phenomenon of greenwashing and lack of transparency in information. Green advertising skepticism reflects the degree to which consumers doubt the authenticity of environmental claims, thereby affecting how they receive and evaluate information

[49]. According to BRT, green advertising skepticism can be seen as a reason against, weakening the process of converting positive elements into behavioral intentions [34, 36].

Regarding the relationship between KOL trustworthiness and GPI, KOL trustworthiness helps reduce uncertainty and promote consumer behavior [12, 40]. However, when green advertising skepticism is high, consumers tend to doubt the commercial motives behind the content shared by KOLs, thereby weakening the impact of KOL trustworthiness on GPI. Conversely, when green advertising skepticism is low, the positive impact of KOL trustworthiness is enhanced [50].

Similarly, green trust promotes GPI by reducing perceived risk [12]. However, under conditions of high green advertising skepticism, consumers tend to be suspicious of environmental commitments, thereby weakening the impact of green trust on GPI [49]. When green advertising skepticism is low, green trust can play a stronger role in promoting purchase intention [51].

Thus, green advertising skepticism does not directly negate the role of positive factors but acts as a regulator, changing the level of influence of KOL trustworthiness and green trust on GPI. Therefore, the following hypotheses are proposed:

H5a

Green advertising skepticism regulates the relationship between KOLs trustworthiness and green purchase intention.

H5b

Green advertising skepticism regulates the relationship between green trust and green purchase intention.

Based on the theoretical relationships proposed from SCT and BRT, the study constructs a model in which KOL attractiveness influences KOL trustworthiness and green trust. Subsequently, KOL trustworthiness and green trust together impact GPI. At the same time, green advertising skepticism plays a moderating role in these relationships (see Fig. 1).

3 Methodology

The theoretical framework has five research constructs (see Fig. 1). Specifically, the attractiveness and trustworthiness scales, each consisting of four observed variables, are adapted from Ohanian's study [52]. The green trust scale consists of three observed variables, inherited from Wasaya et al.'s study [53]. Meanwhile, the green advertising skepticism scale with three observed variables is developed based on Mohr et al.'s study [54]. Finally, the GPI scale is inherited from Paul et al.'s study [55], consisting of five observed variables. To ensure clarity and comprehensibility, the survey provides explanations of key terms at the beginning. The variables were evaluated using a 5-point Likert scale, ranging from "Strongly disagree" to "Strongly agree".

This study focuses on consumers using social media platforms to shop and get acquainted with celebrities. In addition, a convenient sampling method was used due to limitations in accessing formal sampling frameworks and the ease of accessing modern consumers from diverse backgrounds, learning conditions, and income levels through the online platform Google Forms [56].

After data collection, a total of 300 valid responses were collected. 110 respondents were male (36.67%) and 190 were female (63.33%). Regarding age, 278 participants (92.67%) were between 18 and 29 years old, while 22 respondents (7.33%) were 30 years old or older. In terms of monthly income, 221 survey participants earned less than USD 380 (73.67%), followed by 50 participants (16.67%) earning between USD 380 and USD 760, and 29 participants (9.66%) earning more than USD 760. Regarding purchasing behavior, 247 people (82.33%) of the survey participants reported buying green products less than three times per month, while 53 people (17.67%) reported buying green products four or more times per month (see Table 1).

This study used SmartPLS 4.0 software to analyze partial least squares structural equation model (PLS-SEM). The analysis process was carried out in two main stages: stage one evaluated the measurement model, and stage two evaluated the structural model [57].

Table 1
Descriptive statistics.

Source: Own research

Variable	Category	N	Percent %
Gender	Male	110	36.67
	Female	190	63.33
Age	18–29	278	92.67
	30 or above	22	7.33
Monthly Income	Less than USD 380	221	73.67
	USD 380–760	50	16.67
	More than USD 760	29	9.66
Monthly frequency of buying green products	Below 3 times	247	82.33
	4 times or above	53	17.67

4 Results

4.1 Measurement model assessment

The first stage involved evaluating the measurement model. First, the reliability of the Cronbach's Alpha coefficient (CA) and the composite reliability (CR) of the scale were checked. Table 2 shows that the lowest values of the KOL attractiveness scale are 0.719 and 0.825, respectively, which ensures the reliability of the scale. It should also be noted that from Table 2, all extracted mean variance (AVE) values are greater than 0.5 and the output loading coefficients are greater than 0.7, meeting the proposed conditions [58].

The study used the heterogeneity-monogeneity correlation ratio matrix (HTMT) to assess discriminant validity. On top of that, all values are less than 0.85 [58], so discriminant validity meets the conditions [59]. Then, the structural model was evaluated.

Table 2
Data validity

Concept	CA	CR	AVE	Outer loading	AN	GPI	GAS	GT
AN	0.719	0.825	0.542	0.711–0.752				
GPI	0.813	0.869	0.569	0.729–0.773	0.353			
GAS	0.877	0.879	0.711	0.726–0.949	0.278	0.083		
GT	0.731	0.848	0.650	0.787–0.823	0.272	0.331	0.131	
TW	0.750	0.841	0.570	0.724–0.766	0.474	0.355	0.181	0.174

AN: KOLs attractiveness, GPI: Green purchase intention, GAS: Green advertising skepticism, GT: Green trust, TW: KOLs trustworthiness

4.2 Structural model assessment

The first step in evaluating the measurement model is to verify the absence of multicollinearity between the variables. Table 3 shows that the VIFmax coefficient is 2.840, which is less than 3 and therefore satisfies the conditions proposed by [60]. Multicollinearity thus does not affect the research model. Furthermore, to ensure the reliability of the structural model, we also assessed the common method bias (CMB). A high CMB can amplify or attenuate the estimated relationships between the structures. According to the study by Cheah et al. [57], a VIF value less than 3.3 indicates that the CMB is unlikely to significantly bias the research results.

In addition, the coefficient of determination R^2 of most variables is greater than 0.1, indicating that the model has an acceptable level of explanation for the research variables in the context of consumer behavior research [61]. The GT variable alone has an $R^2 = 0.038$, reflecting its limited explanatory power.

Additionally, the Q2 index being greater than 0 indicates that all variables in the model are highly explanatory.

Table 3
Multicollinearity and power explanatory

Variable	VIF	R^2	Q^2
AN	1.326–1.404	0.129	0.111
GPI	1.513–1.760	0.178	0.029
GAS	2.278–2.840		
GT	1.427–1.461	0.038	0.018
TW	1.361–1.506		
AN: KOLs attractiveness, GPI: Green purchase intention, GAS: Green advertising skepticism, GT: Green trust, TW: KOLs trustworthiness			

The results of the analysis (see Table 4) show that most hypotheses are accepted at a 95% significance level (P value < 0.05). However, the path of GAS × TW → GPI was rejected.

Table 4
Results

Path	β	STDEV	T_Value	*P*_Value	Result
AN → TW	0.360	0.067	5.351	0.000	Supported
AN → GT	0.196	0.085	2.308	0.021	Supported
TW → GPI	0.220	0.070	3.134	0.002	Supported
GT → GPI	0.240	0.076	3.142	0.002	Supported
GAS × TW → GPI	-0.037	0.079	0.468	0.640	Rejected
GAS × GT → GPI	-0.186	0.087	2.150	0.032	Supported
AN: KOLs attractiveness, GPI: Green purchase intention, GAS: Green advertising skepticism, GT: Green trust, TW: KOLs trustworthiness					

4.3 Discussion

First, KOL attractiveness has a positive impact on both green trust (β = 0.196) and KOL trustworthiness (β = 0.360), indicating that when consumers pay more attention to content conveyed by KOLs. They tend to process information more deeply. From there, consumers form stronger trust in both the environmental message and the information source [42]. This finding is consistent with recent studies, emphasizing the role of interaction level and information reception in forming trust in the digital media environment [62]. At the same time, this finding also reinforces the argument that the perceived

characteristics of influencers can act as social signals to simplify the information evaluation process in the context of consumers facing online information overload [23, 38].

Next, KOL trustworthiness had a positive influence on GPI (β = 0.220), indicating that KOL trustworthiness plays a crucial role in shaping consumer intentions. When consumers perceive KOLs as trustworthy and knowledgeable, they tend to have a more positive assessment of the product and are willing to translate that trust into purchase intention [48]. This result is consistent with recent studies on the role of information sources in the digital environment and influencer marketing, suggesting that the trustworthiness of information sources helps reduce perceived risk and increase the likelihood of accepting green messages [45, 63]. Meanwhile, green trust also had a positive impact on GPI (β = 0.240), indicating that belief in the authenticity of environmental commitments is a key factor driving green consumption behavior. From a theoretical perspective, green trust acts as a mechanism to reduce uncertainty and support the decision-making process in spite of the difficult-to-verify environmental information [10, 13].

The moderation results showed that green advertising skepticism did not significantly affect the relationship between KOL trustworthiness and GPI (β = -0.037), but weakened the relationship between green trust and GPI (β = -0.186). This suggests that when the level of skepticism is high, consumers tend to be more cautious in evaluating environmental claims, thereby reducing the impact of green trust on GPI [64, 65]. Conversely, the impact of KOL trustworthiness is maintained, implying that personalized signals from KOLs are better able to overcome the skepticism barrier than corporate messages [49]. This finding suggests that trust in the source acts as a mediating mechanism to mitigate the negative impact of skepticism in green consumption [17, 23].

5 Conclusion

This research aims to clarify the mechanism of impact of KOLs on GPI by integrating two theoretical platforms, SCT and BRT, along with independent and moderating variables. Instead of approaching consumer behavior from only the perspective of single attitudes or beliefs, the study answers how social environmental factors, KOLs, and the cognitive inference process: green trust and green advertising skepticism interact to form behavioral intentions.

Empirical results show that KOL attractiveness has a positive influence on both KOL trustworthiness and green trust, with the impact on trustworthiness being stronger. This suggests that in the digital media environment, emotional factors such as KOL attractiveness act as cognitive signals that help consumers quickly form an assessment of the reliability of information sources [66, 67]. Simultaneously, both KOL trustworthiness and green trust have a positive impact on GPI, emphasizing the importance of trust in transforming behavior. [10, 12].

The study shows that green advertising skepticism does not moderate the relationship between KOL trustworthiness and GPI, but has a negative moderating role in the relationship between green trust and GPI. This suggests that critical cognitive factors can weaken the conversion of trust into behavior,

especially when consumers doubt the authenticity of environmental claims [49, 68]. This result is consistent with BRT's argument that reasons against can reduce the effectiveness of behavior promoters [21].

The study expands the application of SCT and BRT in green consumption, while affirming KOLs as an important source of influence in the digital media environment.

5.1 Theoretical implications

The first theoretical contribution of the study is to extend the intersection between SCT and BRT in explaining GPI. Through the combination of variables such as KOL attractiveness, KOL trustworthiness, and green trust, the study simultaneously described both the social environment factor and the cognitive reasoning process in forming GPI [14, 38]. This study overcomes the limitations of SCT in not clarifying the mechanism of transforming cognition into behavior, as well as the limitations of BRT in not fully considering the role of the social environment [26, 32].

The study extends BRT by transforming the role of green skepticism as a moderating variable instead of a direct influencing factor. This approach clarifies that consumer behavior depends not only on supporting reasons but is also influenced by cognitive conditions that change the effectiveness of persuasive factors [21, 35].

Furthermore, the theoretical framework about GPI is further enhanced by placing greater emphasis on the role of social signals in belief formation, especially important with the difficult-to-verify environmental information and consumers' heavy reliance on intermediary sources [18, 43].

5.2 Practical implications

Research results show that media content from KOLs has a strong influence on consumer awareness and behavior. Therefore, businesses need to select KOLs not only based on popularity but also on their ability to build trust and alignment with the green message [6]. Enhancing green trust plays a key role in promoting purchase intention. Businesses need to ensure transparency, consistency, and verifiable evidence in environmental claims to minimize consumer skepticism [13]. Results show that green advertising skepticism can weaken the impact of green trust on GPI. Therefore, communication strategies need to focus on providing concrete evidence, environmental certifications, and real-world experiences to reduce skepticism and enhance persuasiveness [5].

5.3 Limitations and future directions

Despite making certain contributions, the study has some limitations. The first limitation is that the study was conducted with a convenient sampling method, mainly focusing on young people. This may limit the ability to generalize the results, especially since green consumption behavior is strongly influenced by cultural factors and market development levels [69]. Therefore, expanding the scope of the survey to many different countries or target groups is essential to test the stability of the model.

Using a cross-sectional design, thus only reflecting the relationship between variables at one point in time. Meanwhile, green trust and green advertising skepticism can change over time, and the gap between intention and actual behavior still exists in green consumption [27, 28]. Therefore, further studies should adopt a longitudinal research design to better assess the transformation process from GPI to actual behavior.

Finally, the research model mainly focuses on KOLs and cognitive factors, while green consumer behavior is also influenced by other factors such as environmental knowledge, price, and personal values [23, 70]. Therefore, future studies should expand the model by adding these variables to enhance its explanatory power and more comprehensively reflect the consumer decision-making process.

Declarations

Acknowledgements

The author would like to express sincere gratitude for University of Finance – Marketing, Vietnam.

Author contributions

NQTP, NTTL, and KTT contributed to the formulation and design of the study. NQTP performed data cleaning and analysis. NTTL and KTT conducted data collection and wrote the first draft of the paper. All authors provided input on the early versions of the paper. All authors approved the final version of the manuscript.

Funding

This study is funded by the University of Finance – Marketing, Ho Chi Minh City, Vietnam.

Data availability

Data will be provided upon request.

Ethics approval and consent to participate

This study was conducted in accordance with the principles of the Declaration of Helsinki and was approved by the Institutional Review Board of University of Finance – Marketing under ethical approval reference number 4441/QĐ-ĐHTCM on 30 December 2025. All participants provided electronic informed consent before data collection. Participation was voluntary and anonymous. The survey was administered from 10 February 2026 to 30 March 2026 using an online Google Forms questionnaire, which included an electronic informed consent form.

Consent for publication

Not applicable.

Clinical trial number

Not applicable.

Informed consent

All informants had agreed to the informed consent by answering the survey questions.

Competing interests

The authors declare no competing interests.

References

1. Khattak S, Fatima R. Economic transformation in emerging economies: The role of structural change and human capital. Inverge J Social Sci. 2026;5(1):302–15. https://doi.org/10.63544/ijss.v5i1.244.
2. Moro KD, Xi J, Fumey MP, Awuye SK, Sackitey GM. Industrialization, energy demand and environmental pollution nexus in MINT economies: Does cleaner energy transition and environmental technology play a mitigating role? J Environ Manage. 2025;370:124451. https://doi.org/10.1016/j.jenvman.2025.124451.
3. IQAir. (2025). 2024 World Air Quality Report: Region & City PM2.5 Analysis.
4. UNOCHA Vietnam Report. (2024). Viet Nam: Typhoon Yagi and Floods - Situation Update No. 3.
5. Ogiemwonyi O, Alam MN, Alshareef R, Alsolamy M, Azizan NA, Mat N. Environmental factors affecting green purchase behaviors of the consumers: Mediating role of environmental attitude. Clean Environ Syst. 2023;10:100130. https://doi.org/10.1016/j.cesys.2023.100130.
6. Cui T, Tang S, Iqbal Q. The role of green influencers on users' green consumption intention: An empirical study from China and Pakistan. Asia Pac J Mark Logistics. 2025;37(7):1854–70. https://doi.org/10.1108/APJML-05-2024-0561.
7. Vo MS, Ngo TTA, Pham TC. The impact of KOLs on consumption intention: The mediating role of perceived brand quality. Sustainable Futures. 2026. https://doi.org/10.1016/j.sftr.2026.101673.
8. Tran TTH, Uehara W. The influence of key opinion leaders on consumers’ purchasing intention regarding green fashion products. Front Communication. 2023;8:1296174. https://doi.org/10.3389/fcomm.2023.1296174.
9. Sokolova K, Kefi H. Instagram and YouTube bloggers promote it, why should I buy? How credibility and parasocial interaction influence purchase intentions. J Retailing Consumer Serv. 2020;53:101742. https://doi.org/10.1016/j.jretconser.2019.01.011.
10. Li Y, Shan B. The influence mechanism of green advertising on consumers’ purchase intention for organic foods: The mediating roles of green perceived value and green trust. Front Sustainable Food Syst. 2025;9:1515792. https://doi.org/10.3389/fsufs.2025.1515792.

11. Tung HT, Giang DT, Anh NN, Anh NM, Anh ND, Toan NH. Trust the green, buy the green: How ESG marketing shapes brand attitude and trust toward green purchase intentions among Vietnam's Gen Z consumers. J Mark Manage. 2026. https://doi.org/10.1080/0965254X.2026.2662666.
12. Uikey AA, Marak ZR, Baber R, Kautish P. Trust green, pay more: Decoding green brand loyalty and willingness to pay more for electric vehicles through green transparency and green perceived value. Acta Psychol. 2026;264:106598. https://doi.org/10.1016/j.actpsy.2026.106598.
13. Cascavilla A, Caferra R, Morone A, Morone P. Experimental evidence on consumers' willingness to pay in the sustainable fashion industry. Sci Rep. 2025;15:38752. https://doi.org/10.1038/s41598-025-38752.
14. Guan L, Zhang EY, Gu MM. (2024). Examining generative AI–mediated informal digital learning of English practices with social cognitive theory: A mixed-methods study. ReCALL. https://doi.org/10.1017/S0958344024000259
15. Tetrevova L, Kotkova Striteska M, Kuba O, Prakash V, Prokop V. When trust and distrust come into play: How green concern, scepticism and communication affect customers' behaviour. Bus Strategy Environ. 2025. https://doi.org/10.1002/bse.4144.
16. Akram U, Lavuri R, Bilal M, Hameed I, Byun J. Exploring the roles of green marketing tools and green motives on green purchase intention in sustainable tourism destinations: A cross-cultural study. J Travel Tourism Mark. 2024;41(4):453–71. https://doi.org/10.1080/10548408.2023.2293022.
17. Borah PS, Dogbe CSK, Marwa N. Generation Z's green purchase behavior: Do green consumer knowledge, consumer social responsibility, green advertising, and green consumer trust matter for sustainable development? Bus Strategy Environ. 2024;33(5):4530–46. https://doi.org/10.1002/bse.3714.
18. Nguyen-Viet B, Tran CT, Ngo HTK. Corporate social responsibility and behavioral intentions in an emerging market: The mediating roles of green brand image and green trust. Clean Responsible Consum. 2024;12:100170. https://doi.org/10.1016/j.clrc.2024.100170.
19. Bandura A. Social cognitive theory: An agentic perspective. Ann Rev Psychol. 2001;52(1):1–26. https://doi.org/10.1146/annurev.psych.52.1.1.
20. Rizomyliotis I. Consumer Trust and Online Purchase Intention for Sustainable Products. Am Behav Sci. 2026;70(5). https://doi.org/10.1177/00027642241236174.
21. Bhardwaj S, Chitnis A, Venkatesh A. What drives green purchase? A study on behavioural reasoning theory. J Bus Res. 2024. http://doi.org/10.5281/zenodo.12208975.
22. Chatterjee S, Sreen N, Sadarangani PH, Gogoi BJ. Impact of green consumption value, and context-specific reasons on green purchase intentions: A behavioral reasoning theory perspective. J Int Consumer Mark. 2022;34(3):285–305. https://doi.org/10.1080/08911762.2021.1996670.
23. Zhao X, Zhu Z, Shan M, Cao R, Chen H. Informers or entertainers: The effect of social media influencers on consumers' green consumption. J Retailing Consumer Serv. 2024;77:103647. https://doi.org/10.1016/j.jretconser.2023.103647.

24. Nguyen PV, Le HTPM. Green influencers' source credibility in driving customers’ green behaviors: Role of trust, engagement, and knowledge in a cross-country study. J Retailing Consumer Serv. 2025;77:104505. https://doi.org/10.1016/j.jretconser.2025.104505.
25. Ajzen I. The theory of planned behavior. Organ Behav Hum Decis Process. 1991;50(2):179–211. https://doi.org/10.1016/0749-5978(91)90020-T.
26. Klabi F. (2025). Factors affecting green product purchase intention in an emerging market. Heliyon. https://doi.org/10.1016/j.ssaho.2025.101570
27. Pontes S, Naranjo-Zolotov M, Painho M. From intention to action: How environmental setback perception mediates green purchase behaviour. J Clean Prod. 2024;468:143144. https://doi.org/10.1016/j.jclepro.2024.143144.
28. Patiño-Toro ON, Valencia-Arias A, Palacios-Moya L, Uribe-Bedoya H, Valencia J, Londoño W, Gallegos A. Green purchase intention factors: A systematic review and research agenda. Sustainable Environ. 2024;10(1):2356392. https://doi.org/10.1080/27658511.2024.2356392.
29. Schunk DH, DiBenedetto MK. Motivation and social cognitive theory. Contemp Educ Psychol. 2020;60:101832. https://doi.org/10.1016/j.cedpsych.2019.101832.
30. Bandura A. Self-efficacy: The exercise of control. W. H. Freeman; 1997.
31. Borah P, Lorenzano K, Yel E, Austin E. Social cognitive theory and willingness to perform recommended health behavior: The moderating role of misperceptions. J Health Communication. 2024;29(1):49–60. https://doi.org/10.1080/10810730.2023.2282035.
32. Esparza AM, McMurray A, Rambo-Hernandez KE. Changes within: How within-person changes on key social cognitive career theory constructs relate to first-year engineering student persistence intentions. J Vocat Behav. 2025. https://doi.org/10.1016/j.jvb.2025.104141.
33. Knupfer H, Neureiter A, Matthes J. From social media diet to public riot? Engagement with greenfluencers and young social media users' environmental activism. Comput Hum Behav. 2023;139:107527. https://doi.org/10.1016/j.chb.2022.107527.
34. Westaby JD. Behavioral reasoning theory: Identifying new linkages underlying intentions and behavior. Organ Behav Hum Decis Process. 2005;98(2):97–120. https://doi.org/10.1016/j.obhdp.2005.07.003.
35. Sadiq M, Adil M, Paul J. An innovation resistance theory perspective on purchase of eco-friendly cosmetics. J Retailing Consumer Serv. 2020;59:102369. https://doi.org/10.1016/j.jretconser.2020.102369.
36. Tandon A, Kaur P, Bhatt Y, Mäntymäki M, Dhir A. Why do people purchase organic food? The role of environmental concerns and trust. J Retailing Consumer Serv. 2020;57:102247. https://doi.org/10.1016/j.jretconser.2020.102247.
37. Bandura A. Social foundations of thought and action: A social cognitive theory. Prentice-Hall; 1986.
38. Dwivedi YK, et al. Setting the future of digital and social media marketing research: Perspectives and research propositions. Int J Inf Manag. 2021;59:102168. https://doi.org/10.1016/j.ijinfomgt.2020.102168.

39. Bhatt Y, Ghuman K. Managerial cognition and environmental behavioral intentions: A behavioral reasoning theory perspective. Corp Soc Responsib Environ Manag. 2022;29(5):1315–29. https://doi.org/10.1002/csr.2271.
40. Ohanian R. Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. J Advertising. 1990;19(3):39–52. https://doi.org/10.1080/00913367.1990.10673191.
41. Cascio Rizzo GL, Berger J, De Angelis M, Pozharliev R. How sensory language shapes influencer's impact. J Consum Res. 2023;50(4):810–25. https://doi.org/10.1093/jcr/ucad017.
42. Hossain MS, et al. The influence of celebrity credibility, attractiveness, and social media influence on trustworthiness, perceived quality, and purchase intention for natural beauty care products. J Retailing Consumer Serv. 2025;84:104012. https://doi.org/10.1016/j.jretser.2025.104012.
43. Shojaei AS, Barbosa B. The impact of influencers' credibility and consumer involvement on attitudes and purchase intention: A comparison before and after the pandemic. EuroMed J Bus. 2026;21(5):18–47. https://doi.org/10.1108/EMJB-02-2025-0068.
44. Sardar S, Vijay TS. Social media influencers and purchase intention: A review and research agenda. Int J Consumer Stud. 2025;49(3):e70046. https://doi.org/10.1111/ijcs.70046.
45. Virkus T, Klein K. The role of authenticity and skepticism in consumers' reactions to brand activism. J Bus Res. 2025. https://doi.org/10.1016/j.jbusres.2025.115944.
46. Walter N, Föhl U, Sander F, Nies A. Act as you preach! Authentic brand purpose versus woke washing's impact on brand credibility: The moderating role of cause involvement and consumer skepticism. J Bus Res. 2024;184:114868. https://doi.org/10.1016/j.jbusres.2024.114868.
47. Alhumud AA, Alshurideh M, Al-Hawary S, Kurdi A, B. The impact of digital CSR disclosure on customer trust and engagement: The moderating role of consumer deontology. J Bus Res. 2025. https://doi.org/10.1016/j.jbusres.2024.115035.
48. Audrezet A, de Kerviler G, Moulard JG. Authenticity under threat: When social media influencers need to go beyond self-presentation. J Bus Res. 2020;117:557–69. https://doi.org/10.1016/j.jbusres.2018.07.008.
49. Pham BT, Huynh TH. Greenwashing and brand avoidance: Examining green scepticism, green perceived risk, and green consumer confusion. J Serv Mark. 2025. https://doi.org/10.1108/JSM-07-2025-0471.
50. Zhou S, Seo E. (2026). How green skepticism undermines green purchase intention: The roles of information seeking and anticipated guilt. Sustainability. https://doi.org/10.3390/su18031539
51. Ahmed RR, Streimikienė D, Qadir H, Streimikis J. Effect of green marketing mix, green customer value, and attitude on green purchase intention: Evidence from the USA. Environ Sci Pollut Res. 2023;30:11473–95. https://doi.org/10.1007/s11356-022-22944-7.
52. Ohanian R. The impact of celebrity spokespersons' perceived image on consumers' intention to purchase. J Advertising Res. 1991;31(1):46–54.

53. Wasaya A, Saleem MA, Ahmad J, Nazam M, Khan MMA, Ishfaq M. Impact of green trust and green perceived quality on green purchase intentions. Environ Dev Sustain. 2021;23(9):13418–35. https://doi.org/10.1007/s11007-020-01219-6.
54. Mohr LA, Eroğlu D, Ellen PAM. The development and testing of a measure of skepticism toward environmental claims in marketers' communications. J Consum Aff. 1998;32(1):30–55.
55. Paul J, Modi A, Patel J. Predicting green product consumption using theory of planned behavior and reasoned action. J Retailing Consumer Serv. 2016;29:123–34. https://doi.org/10.1016/j.jretconser.2015.11.006.
56. Winton BG, Sabol MA. A multi-group analysis of convenience samples: Free, cheap, friendly, and fancy sources. Qualitative Res Psychol. 2021;18(4):861–76. https://doi.org/10.1080/13645579.2021.1961187.
57. Cheah J-H, Amaro S, Roldán JL. Multigroup analysis of more than two groups in PLS-SEM: A review, illustration, and recommendations. J Bus Res. 2023;146:337–51. https://doi.org/10.1016/j.jbusres.2022.113539.
58. Hair JF, Hollingsworth CL, Randolph AB, Chong AYL. An updated and expanded assessment of PLS-SEM in information systems research. Industrial Manage Data Syst. 2017;117(3):442–58. https://doi.org/10.1108/IMDS-04-2016-0130.
59. Hair JF, Risher JJ, Sarstedt M, Ringle CM. When to use and how to report the results of PLS-SEM. Eur Bus Rev. 2019;31(1):2–24. https://doi.org/10.1108/EBR-11-2018-0203.
60. Legate AE, Ringle CM, Hair JF Jr.. PLS-SEM: A method demonstration in the R statistical environment. Hum Res Dev Q. 2023. https://doi.org/10.1002/hrdq.21517.
61. Hair JF, Hult GTM, Ringle CM, Sarstedt M, Danks NP, Ray S. (2021). Partial least squares structural equation modeling (PLS-SEM) using R: A workbook. Springer. https://doi.org/10.1007/978-3-030-80519-7
62. Olfat M, Topic-Rutherford M, Beig MM, Barkhi F. What makes an influencer's followers green? U-shaped curvilinear relationships between influencers' interactive practices and perceived pro-environmental behaviors. Internet Res. 2025;35(1):1–26. https://doi.org/10.1108/INTR-09-2024-1395.
63. Singh N, Misra R, Quan W, Radic A, Lee S-M, Han H. An analysis of consumers' trusting beliefs towards the use of e-commerce platforms. Humanit Social Sci Commun. 2024;11:899. https://doi.org/10.1057/s41599-024-03395-6.
64. Keskïn H, Yalcin H, Esen E. Bridging the readability gap: corporate disclosure trends. Manag Decis. 2026;1–27. https://doi.org/10.1108/MD-03-2025-0581.
65. Hina M, Islam N, Luo XR. Towards sustainable consumption decision-making: Examining the interplay of blockchain transparency and information-seeking in reducing product uncertainty. Decis Support Syst. 2024;188:114370. https://doi.org/10.1016/j.dss.2024.114370.
66. Ha M-T. Greenwash and green brand equity: The mediating role of green brand image, green satisfaction, and green trust, and the moderating role of green concern. PLoS ONE.

2022;17(11):e0277421. https://doi.org/10.1371/journal.pone.0277421.

67. Saif S, Zameer H, Wang Y, Ali Q. The effect of retailer CSR and consumer environmental responsibility on green consumption behaviors: mediation of environmental concern and customer trust. Mark Intell Plann. 2024;42(1):149–67. https://doi.org/10.1108/MIP-04-2023-0181.
68. Essiz O, Yurteri S, Mandrik C, Senyuz A. Exploring the value-action gap in green consumption: Roles of risk aversion, subjective knowledge, and gender differences. J Int Consumer Mark. 2022;35(1):67–92. https://doi.org/10.1080/08911762.2022.2116376.
69. Kumar N, Garg P, Singh S. Pro-environmental purchase intention towards eco-friendly apparel: Augmenting the theory of planned behavior with perceived consumer effectiveness and environmental concern. Cogent Bus Manag. 2022;9(1). https://doi.org/10.1080/20932685.2021.2016062.
70. Li D. Impact of green advertisement and environmental knowledge on intention of consumers to buy green products. BMC Psychol. 2025;13:220. https://doi.org/10.1186/s40359-025-02020-9.

Figures

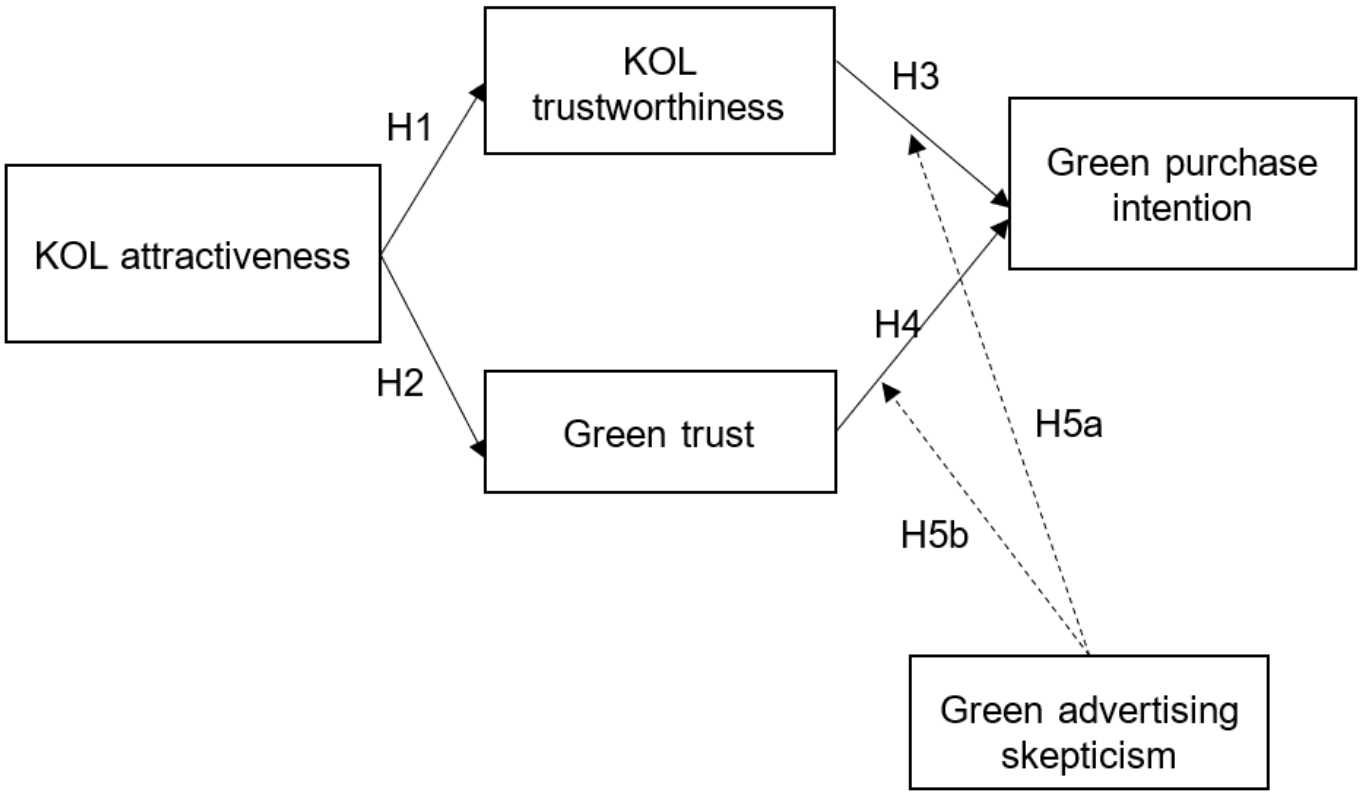


Figure 1

Conceptual framework

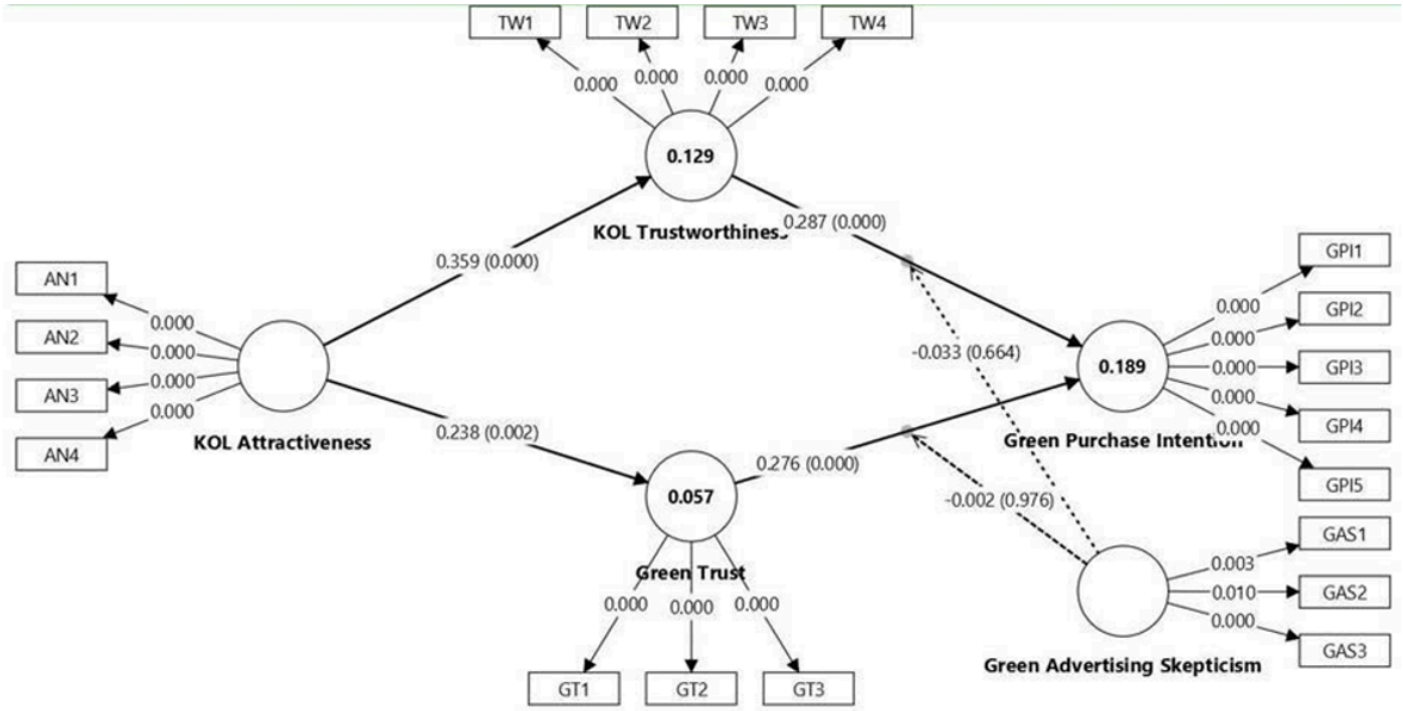


Figure 2

SEM results