

Interplay Among Perceived Advertisement Impact, Environmental Values, and Solar Product Purchase Intention

Anand Thakur¹
Ishita Bansal²
Kamini Singla³

Abstract

Purpose : India has asserted its leadership in the global effort against climate change and sustainable development, with the government dedicated to promoting solar power as the predominant energy source. Effective marketing strategies have historically played a pivotal role in influencing consumer purchase decisions. This study investigated how advertisements influenced customers' environmental values and intent to purchase solar energy products.

Methodology : The research employed covariance-based structural equation modeling to analyze the proposed relationships in the theoretical framework. Data were gathered from 266 potential users of solar energy products.

Findings : The study findings indicated that informative advertisements significantly impacted environmental values. Purchase intentions were influenced by informative content in advertisements, brand reinforcement, and stimulation. Additionally, the research confirmed a direct and significant relationship between environmental values and purchase intentions toward solar energy products.

Practical Implications : Marketers should craft informative advertisements that highlight the sustainability benefits of solar energy products. Aligning these messages with consumers' environmental values can significantly enhance purchase intention for solar energy products, reinforcing brand identity and fostering long-term consumer loyalty in the competitive renewable energy market.

Originality : This research analyzed how advertising influences consumer environmental values and purchase intentions for solar energy products in India. It emphasized the importance of relevant content in advertisements for enhancing environmental values and encouraging sustainable consumption behaviors in the energy sector.

Keywords : environmental values, perceived advertisement impact, purchase intention, solar energy products, sustainable development

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¹ *Professor & Dean (Corresponding Author)*, School of Management; Head, Department of Financial Administration, Central University of Punjab, VPO-Ghudda, Bathinda - 151 401, Punjab. (Email : anand.thakur@cup.edu.in) ;
ORCID iD : <https://orcid.org/0000-0001-5575-9434>

² *UGC-SRF*, Department of Financial Administration, School of Management, Central University of Punjab, VPO-Ghudda, Bathinda - 151 401, Punjab. (Email : bansalishita794@gmail.com) ; ORCID iD : <https://orcid.org/0009-0004-1609-0482>

³ *UGC-SRF*, Department of Financial Administration, School of Management, Central University of Punjab, VPO-Ghudda, Bathinda - 151 401, Punjab. (Email : kaminisingla213@gmail.com) ; ORCID iD : <https://orcid.org/0009-0004-4611-6727>

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Climate change has become a critical global challenge, with greenhouse gas emissions driving alarming temperature increases (Denchak, 2023). The energy sector, particularly coal combustion, contributes significantly to these emissions (United Nations, n.d.). As nations seek sustainable alternatives, solar energy has emerged as a leading renewable source due to its vast availability and environmental benefits (United Nations, n.d.). With its abundant sunlight, India has positioned solar energy at the core of its renewable energy policies. However, despite strong policy support and falling solar tariffs, consumer adoption of solar energy products remains limited, particularly in residential sectors (World Energy Outlook, 2021).

A key challenge is the lack of consumer awareness and engagement, which can be influenced by marketing strategies, particularly advertising (Palm & Eriksson, 2018). People are unaware of solar product marketers due to a lack of investment in adequate marketing communication strategies (Luckett & Needham, 2021). Advertising can support public policies that promote the usage of alternative energy sources such as solar power (Hartmann & Apaolaza-Ibáñez, 2012). Advertising appeals have a significant bearing on the value systems of consumers (Taufique, 2022). Positive environmental values shape sustainable consumption behavior by driving purchase intentions toward environment-friendly products (Kim et al., 2019; Kumar, Garg, & Singh, 2022; Sun et al., 2021; Tee et al., 2022). Past studies have contributed by exploring the factors affecting the purchase of solar products (Hwang et al., 2016; Kansal et al., 2017; Kesari et al., 2018; Kim et al., 2014; Kumar, Hundal, & Syan, 2020; Kumar, Syan, Kaur, & Hundal, 2020). However, research on consumer behavior toward solar energy products is still emerging.

Consequently, a study on the effect of solar marketing on environmental values and purchase behavior in emerging Indian markets is considered imperative. Promotional campaigns can contribute to the development of a more substantial market for solar technology. A study analyzing the role of advertising and environmental values in shaping consumers' purchase behavior would benefit marketers of solar products in framing their promotional strategies. This study aims to achieve the following research objectives:

- To analyze the influence of perceived advertisement impact on consumers' environmental values and purchase intention toward solar energy products.
- To examine the impact of environmental values on purchase intention toward solar energy products.

Review of Literature

Perceived Advertising Impact

In order to fight the intense competition that brands face in the market, creative and novel promotional tools have always proved to be instrumental (Domazet et al., 2018). The oldest and most mature promotional tool available at brands' disposal is “advertising.” Advertising has a substantial impact on the consumer's purchase behavior. Consumers cannot be persuaded only based on advertisements, but initiating the interaction through interactive advertisements is vital (Abbas et al., 2020). It is suggested by the “Elaboration Likelihood Model” (Petty & Briñol, 2011) that communication about a product or service has a direct impact on the attitude that the consumer will form toward it. Therefore, advertisements are critical in determining consumer attitudes.

Product communication has experienced a shift toward environmental attuning (Grebmer & Diefenbach, 2020). Various studies have examined the behavioral impact of advertising products with environmental claims (Kao & Du, 2020). Advertising can sensitize consumers toward ecological concerns and improve their awareness of environment-friendly initiatives. Creative green advertisements have proved more effective in retaining consumers' attention than standard advertisements (Shen et al., 2020). Innovative solutions to energy needs, embedded in consumer needs and affordability, are the need of the hour (Ali & Yadav, 2018). The findings also

suggest that advertising can act as a tool for establishing the credibility of the green products being marketed by an organization. Therefore, advertising may be a powerful tool in engaging consumers' attention toward green purchases (Zhu, 2012). The present study used Schlinger's (1979) viewer response profile (VRP) dimensions for evaluating the perceived impact of advertisements on environmental values and proposes to test the following hypotheses:

- ⇒ **Ha1** : Relevant news in advertising has a positive impact on environmental values.
- ⇒ **Ha2** : Brand reinforcement in advertising has a positive impact on environmental values.
- ⇒ **Ha3** : Stimulation in advertising has a positive impact on environmental values.
- ⇒ **Ha4** : Empathy in advertising has a positive impact on environmental values.
- ⇒ **Ha5** : Familiarity with advertising has a positive impact on environmental values.
- ⇒ **Ha6** : Confusion in advertising has a negative impact on environmental values.

Studies show that advertising value positively impacts purchase intention. Advertising value is ascertained by various factors, including informativeness, credibility, entertainment, irritation, and incentives (Martins et al., 2019). Advertising and factors such as value orientation and individual self (attitude) affect the purchase intention of environmentally sustainable products (Mandliya et al., 2020). Consumers' awareness of sustainable energy products predominantly affects their perception of the quality and value of these products, which in turn impacts purchase intention (Wu & Chen, 2014). Okada et al. (2019) conducted a study on electronic vehicles and found that awareness directly affected the purchase intention of non-EV users. Based on the above literature, the following hypotheses are proposed to check the impact of perceived advertisement on purchase intention toward solar energy products.

- ⇒ **Ha7** : Relevant news in advertising has a positive impact on purchase intention.
- ⇒ **Ha8** : Brand reinforcement in advertising has a positive impact on purchase intention.
- ⇒ **Ha9** : Stimulation in advertising has a positive impact on purchase intention.
- ⇒ **Ha10** : Empathy in advertising has a positive impact on purchase intention.
- ⇒ **Ha11** : Familiarity with advertising has a positive impact on purchase intention.
- ⇒ **Ha12** : Confusion in advertising has a negative impact on purchase intention.

Environmental Values

Environmental values are considered to be a significant contributing factor in the determination of the purchase intention of a consumer (Atienza et al., 2022). Control over one's needs, social responsibility, and concern about the global environment for future generations were found to have a direct relationship with environmentally responsible behavior (Kautish & Sharma, 2020). It was also deduced that higher pro-environmental behavior could be observed among individuals who possessed an entrepreneurial outlook and attributed significance to ecological matters (DiVito & Bohnsack, 2017). Fernandes et al. (2024) confirmed that environmental consciousness strengthened sustainable consumption habits. Values shape specific behaviors, consumer demand, and purchase intention. To strengthen consumers' inclination toward purchasing environmental products, inculcation of environmental values is significant (Li et al., 2021). Psychological predictors of environmental

attitude include conspicuous consumption and lifestyle (Singh et al., 2023). Swami et al. (2010) evaluated the stimuli of the three environmental values, namely altruistic, biospheric, and egoistic values. These included political orientation, Big Five personality traits, and Machiavellianism. People with strong egoistic values tend to prefer products suitable for personal interests, whereas those possessing strong altruistic values prefer buying products that benefit others. Biospheric values allow consumers to view the environment as an entity whose destruction falls outside of the purview of the rights of humans (Atienza et al., 2022).

Studies have concluded that altruistic and biospheric values play a positive role, whereas egoistic values play a negative role in green product purchase intention (Li et al., 2021). A study aimed at identifying the values that best explain pro-environmental behavior concluded that people with deep environmental concerns exhibit higher environmental consumerism. Environmental values are critical determinants of consumers' purchase intentions, shaping their behavioral intention toward eco-friendly products, which is critical for achieving sustainable development goals (Li et al., 2021). Given the increased understanding of environmental values, organizations must focus on green advertising to communicate their brand appeal to ecologically sensitive customers (Shen et al., 2020).

➤ **Ha13**: Environmental values positively impact purchase intention.

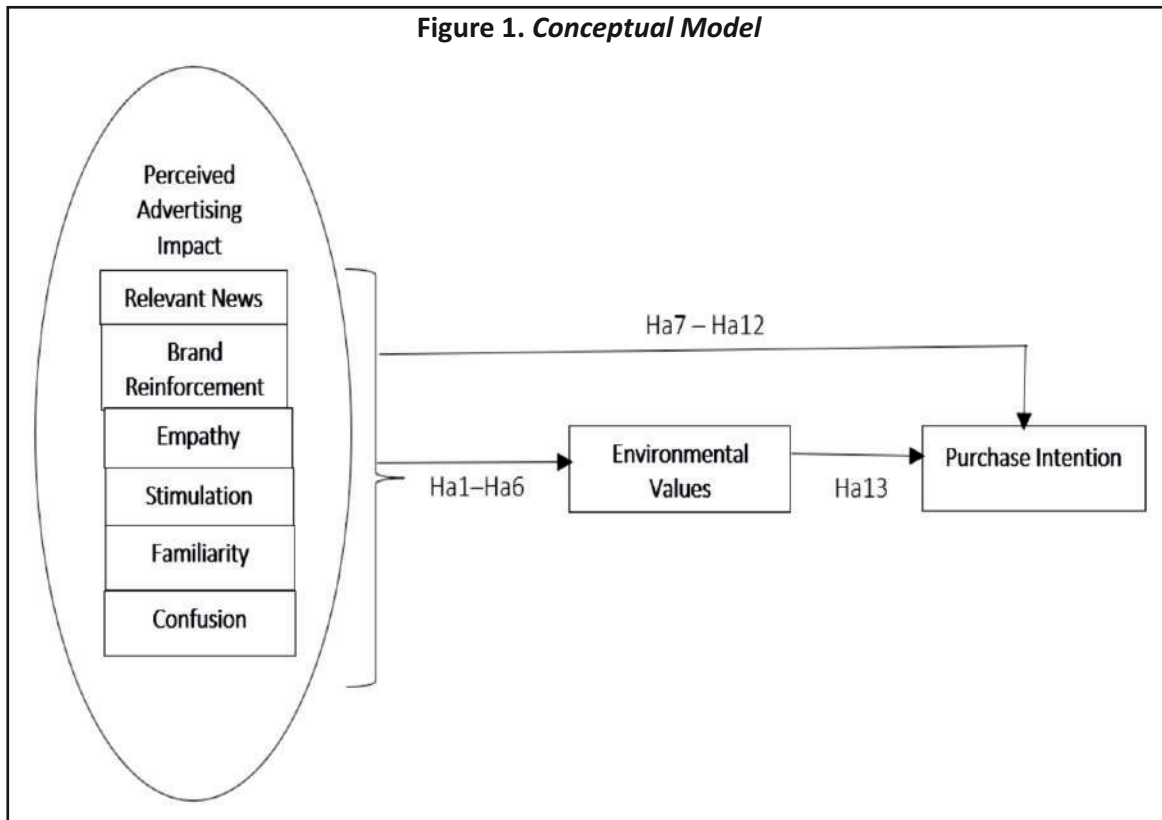
Purchase Intention

Consumer purchase behavior can be studied through purchase intention, which act as consumers' devotion and determination, leading to specific purchase behavior (Zahid et al., 2018). It is affected by dynamic factors, including consumers' self-perception, usefulness, product compatibility, enjoyment perceived from the product, positive and negative word-of-mouth (Zahid et al., 2018), the reputation of the brand, familiarity with the product, social benefits perceived by the consumer (Liu & Li, 2019), green packaging of the product (Chavadi et al., 2024), and the effects and appeal of advertising. Another study concluded that brand personality dimensions, such as success, vivacity, sophistication, and sincerity, could predict purchase intention (de la Paz Toldos-Romero & Orozco-Gómez, 2015). Hong and Cha (2013) opined that the amount of risk the consumer perceives hurts purchase intention. This effect can be controlled through improved customer trust.

Studies have concluded that consumers' attitude toward green advertising positively influences the purchase intention of green products (Zhu, 2012). The higher the environmental concern, the greater the consumers' green purchase intention (Chekima et al., 2016). It has also been opined that the values of the customer will affect the perception of environmental advertising and products (Yusof et al., 2013). Apart from environmental concerns, environmental knowledge and materialism have also been found to impact green purchase intention (Kumar & Jain, 2024). Other factors impacting green purchase decisions include technological progression, social engagement, and cultural values (Routray & Giri, 2024). On the contrary, Upadhyaya and Sijoria (2024) found that environmental concerns and knowledge did not significantly impact green cosmetics purchase intention. Factors hindering green purchases include issues related to infrastructure, cost, and technology (Routray et al., 2025).

Various initiatives are being taken at the global and regional levels to combat climate change. Therefore, it becomes imperative that the purchase intention of green products is further explored at the micro level. Though various studies have been conducted on the effect of advertising on the purchase intention of green products (Disastra et al., 2019; Hee & Yen, 2018; Kumar, Garg, & Singh, 2022 ; Zhu, 2012), there seems to be a paucity of research on the perceived impact of advertising of solar products on environmental values and purchase behavior.

Figure 1 identifies the hypothesized relationships among the dimensions of the perceived impact of advertising: relevant news, brand reinforcement, stimulation, familiarity, and confusion on environmental values and purchase intention. Furthermore, it hypothesizes that environmental values impact purchase intention.



Methodology

Sampling and Data Collection

The present study analyses the relationship among advertisement impact (perceived), environmental values, and purchase intention toward solar energy products. For this, both exploratory and descriptive research designs were used. The study was carried out in the North Indian state of Punjab. The state has recently increased its capacity for producing solar energy by installing over 6,034 million units (Verma, 2022). This figure surpasses other states in the Northern region (Gupta, 2022). To meet the power requirements of Punjab, during the peak summer season, the Punjab Government has been actively working by floating bids and tenders of solar power (Rambani, 2022). Hence, the state has been chosen as the area for the study. Primary data was collected during July 2022 through a single cross-sectional survey of potential users of solar energy products. Following a judgment sampling approach, 300 questionnaires were circulated. After scrutiny, 266 effective responses qualified for further data analysis. In the total sample, 58% of the respondents were males, and 42% were females. Most respondents belonged to the age group of 18–30 years (86%). The majority of them were post-graduates.

Research Instrument and Measurement Scales

The questionnaire was divided into two sections. The first section comprised of two multiple-choice questions asking respondents about their exposure to solar product advertisements and the media type of exposure. The second section measured behavioral constructs: advertising impact (perceived), environmental values, and purchase intention toward solar energy products. All concepts were measured on a 7-point Likert scale

(ranging from *strongly disagree* to *strongly agree*). The measurement scales used in this study were based on the existing literature and adjusted according to the study's specific context. To measure perceived advertising impact, Schlenger's (1979) VRP was adopted. Similarly, a seven-item scale (Dunlap, 2008) for environmental values and an eight-item scale of Duffett (2015) for purchase intention were used (refer to the Appendix). A small-scale pre-investigation and validation through experts were conducted to test the reliability and validity of the questionnaire and were found to be satisfactory.

Analysis Technique

The analysis was performed using structural equation modeling through SPSS AMOS. A two-step approach was followed in the analysis. First, the measurement model was assessed using confirmatory factor analysis to check the constructs' reliability and validity; second, the structured path model was analyzed to determine the relationship between dependent and independent constructs.

Analysis and Results

Confirmatory Factor Analysis

Before analyzing the conceptual model, the reliability and validity of the scales were checked by applying confirmatory factor analysis. The results are summarized in Table 1. First, item reliability was evaluated based on the factor loadings of the items on their respective constructs. All the factor loadings except for empathy exceeded the threshold value of 0.5. Therefore, the construct was eliminated due to weak factor loadings (Hair et al., 2010). The Cronbach's alpha coefficient values fall in the prescribed range of 0.60–0.70 for all constructs (Hair et al., 2010). Convergent validity was confirmed by verifying whether composite reliability and average

Table 1. Item Description and Convergent Validity

Latent Variable	Indicator	Standardized Factor Loading	Composite Reliability	AVE/ Convergent Validity	Cronbach's α
Relevant News	RN1	0.794	0.874	0.538	0.872
	RN2	0.743			
	RN3	0.786			
	RN4	0.747			
	RN5	0.640			
	RN6	0.680			
Brand	BR1	0.892	0.831	0.712	0.829
Reinforcement	BR2	0.793			
Stimulation	S1	0.838	0.880	0.596	0.878
	S2	0.800			
	S3	0.728			
	S4	0.782			
	S5	0.708			
Familiarity	F1	0.869	0.774	0.633	0.766
	F2	0.716			

Confusion	<i>C1</i>	0.903	0.865	0.683	0.860
	<i>C2</i>	0.755			
	<i>C3</i>	0.814			
Environmental Values	<i>EV1</i>	0.719	0.922	0.663	0.920
	<i>EV2</i>	0.816			
	<i>EV3</i>	0.885			
	<i>EV4</i>	0.847			
	<i>EV5</i>	0.760			
	<i>EV6</i>	0.848			
	<i>EV7</i>	0.814			
Purchase Intention	<i>PI1</i>	0.703	0.923	0.632	0.924
	<i>PI2</i>	0.810			
	<i>PI3</i>	0.802			
	<i>PI4</i>	0.809			
	<i>PI5</i>	0.796			
	<i>PI6</i>	0.860			
	<i>PI7</i>	0.805			

Table 2. Discriminant Validity

	Environmental Values	Relevant News	Familiarity	Confusion	Stimulation	Brand Reinforcement	Purchase Intention
Environmental Values	0.814*						
Relevant News	0.503	0.734*					
Familiarity	0.172	0.408	0.796*				
Confusion	-0.245	-0.025	0.516	0.826*			
Stimulation	0.331	0.652	0.512	0.029	0.772*		
Brand Reinforcement	-0.245	-0.009	0.324	0.762	0.044	0.844*	
Purchase Intention	0.496	0.722	0.426	-0.002	0.600	-0.087	0.795*

Note. *represents the square root AVE for each construct. Discriminant validity is established as the square root of AVE for each construct is greater than its correlations with other constructs in the table (Fornell–Larcker criterion).

variance extracted (AVE) values meet the minimum cut-off of 0.70 and 0.50, respectively, as Hair et al. (2010) recommended. Discriminant validity was verified by comparing the value of AVE for each construct with the squared correlation values of other constructs. From Table 2, it is visible that there are no discriminant validity concerns for any construct. The model fit indices are $\chi^2/\text{degrees of freedom} = 1.726$ ($p = 0.00$); CFI (0.943); TLI (0.936); GFI (0.90); and RMSEA (0.052), indicating acceptable measurement model fit (Hu & Bentler, 1999).

Overall Structural Model and Research Hypotheses Testing

Table 3 shows the standardized path coefficient and t -values. Among the five dimensions of perceived advertising effect, relevant news ($SE = 0.066$; $p < 0.05$) significantly impacts environmental values. Therefore, hypothesis (Ha1) is supported, while Ha2, Ha3, Ha5, and Ha6 are not supported at a 5% significance level. Furthermore,

Table 3. Standardized Parameter Estimates for the Structural Model

				Estimate	SE	CR	P	Hypotheses
Ha1	Environmental Values	<---	Relevant News	0.327	0.066	4.941	***	Supported
Ha2	Environmental Values	<---	Brand Reinforcement	-0.060	0.054	-1.104	0.269	Not Supported
Ha3	Environmental Values	<---	Stimulation	-0.022	0.066	-0.339	0.734	Not Supported
Ha5	Environmental Values	<---	Familiarity	0.078	0.054	1.439	0.150	Not Supported
Ha6	Environmental Values	<---	Confusion	-0.110	0.069	-1.598	0.110	Not Supported
Ha7	Purchase Intention	<---	Relevant News	0.425	0.075	5.633	***	Supported
Ha8	Purchase Intention	<---	Brand Reinforcement	-0.112	0.056	-2.023	0.043	Supported
Ha9	Purchase Intention	<---	Stimulation	0.145	0.067	2.164	0.030	Supported
Ha11	Purchase Intention	<---	Familiarity	0.058	0.055	1.067	0.286	Not Supported
Ha12	Purchase Intention	<---	Confusion	0.081	0.070	1.147	0.251	Not Supported
Ha13	Purchase Intention	<---	Environmental Values	0.196	0.075	2.622	0.009	Supported

Note. Level of Significance (α) = 0.05, *** $p < 0.001$

relevant news ($SE = 0.075$; $p < 0.05$), brand reinforcement ($SE = 0.056$; $p < 0.05$), and stimulation ($S.E. = 0.067$; $p < 0.05$) significantly affect purchase intention for solar energy products, while familiarity ($SE = 0.055$; $p > 0.05$) and confusion ($SE = 0.07$; $p > 0.05$) do not affect the same. Thus, these results support hypotheses Ha7– Ha9 and do not support Ha11 and Ha12 with a 5% significance level. Finally, Ha13 analyzing the impact of environmental values on purchase intention is also supported ($SE = 0.075$, $p < 0.05$). The hypotheses Ha4 and Ha10 are not reported, as 'Empathy' was dropped from the analysis due to low factor loading.

The overall model fit is verified, and the model fit indices are obtained. The chi-square fitness value is 712.928, $df = 413$, $CMIN = 1.726$, indicating that the theoretical model can be adapted to the observed data. Additionally, the overall fitness of the model with the results ($RMSEA = 0.052$, $TLI = 0.936$, $CFI = 0.943$, $GFI = 0.90$, $SRMR = 0.0492$) shows that the hypothesis model could reasonably fit with the observed data (Hooper et al., 2010; Hu & Bentler, 1999).

Discussion

Advertisements and promotions will allow individuals to understand the actual worth of sustainable consumption (Kumar, Syan, & Kaur, 2022; Shen et al., 2020). Advertisement appeals tend to affect the factors responsible for consumers' resistance to adopting solar energy products (Hartmann & Apaolaza-Ibañez, 2012; Palm & Eriksson, 2018). The “relevant news” aspect of advertising significantly impacts environmental values and purchase intention for solar energy products (Martins et al., 2019; Shen et al., 2020). Brand reinforcement significantly determines the intention to purchase solar energy products (Chang & Watchravesringkan, 2018). Also, the results indicate that stimulation strongly influences consumers' purchase intentions toward solar energy products. Consumers' environmental values drive their purchase intention toward solar energy products. The penetration of solar energy products toward regular energy consumption needs may be improved by arousing ecological concerns. This may lead to better environmental sensitivity. Numerous studies have supported this finding by examining the relationship between environmental concern and green behavioral intention (Atienza et al., 2022; Hu, 2019; Li et al., 2021; Taufique, 2022).

Some hypotheses are not supported, likely due to the complexity of consumer decision-making due to the interplay of multiple factors. Brand reinforcement does not impact environmental values, reporting that branding alone does not shape consumers' environmental beliefs unless backed by transparent sustainability efforts

(Chang & Watchravesringkan, 2018; Jia et al., 2023). Stimulation also fails to influence environmental values, likely because novelty and excitement in marketing do not necessarily lead to innate environmental concerns (Hartmann & Apaolaza-Ibañez, 2009). Similarly, familiarity and confusion do not significantly impact environmental values or purchase intention, indicating that repeated exposure or information overload does not inherently drive consumer behavior unless the messaging aligns with intrinsic motivations (Akbarina et al., 2023; Park & Stoel, 2005). Prior research suggests that while familiarity builds trust, it does not always translate to action, especially if the product does not align with the consumers' values or needs (Wang et al., 2018). Confusion may lead to decision paralysis rather than product rejection (Ha & Perks, 2005; Pappas, 2016). These findings highlight the need for brands to integrate authenticity and clarity in their sustainability messaging to influence consumer attitudes and purchase behavior effectively.

Implications

Theoretical Implications

This study is aligned with the stimulus–organism–response (SOR) framework, demonstrating that perceived advertisement impact shapes environmental values, which in turn drive purchase intention for solar energy products. It extends Schlinger's (1979) VRP scale by adapting it to the solar energy advertising context. Contrary to conventional assumptions, brand reinforcement and familiarity do not influence environmental values, suggesting that mere brand exposure lacks the power to instill eco-consciousness. Instead, stimulation directly drives purchase intention without shaping environmental values, highlighting that high-engagement ads spark immediate interest but fail to foster deeper sustainability commitments. These findings challenge linear green marketing models, revealing distinct psychological pathways through which advertising influences solar energy adoption.

Managerial Implications

Marketers may prioritize informative advertising, significantly influencing environmental values and purchase intention. Advertisements should focus on cost benefits, efficiency, and government incentives, ensuring consumers receive clear and factual information. Since brand reinforcement influences purchase intention but not environmental values, marketers should build brand trust through certification, transparency, and sustainability commitments rather than relying solely on brand familiarity. Since stimulation impacts purchase intention, engaging and interactive advertisements—such as storytelling, influencer marketing, and virtual demonstrations—can effectively drive consumer action. Marketers may craft precise, engaging, and credible messaging to enhance consumer confidence in solar energy products.

Policy Implications

Government agencies may invest in advertising campaigns emphasizing solar energy's economic and environmental benefits. Since advertising strongly influences purchase intention, public awareness programs should be fact-based, transparent, and engaging to encourage informed decision-making. The results suggest a need for strict advertising guidelines to prevent misleading green claims and enhance consumer trust in solar solutions. Since stimulation drives purchase behavior, policymakers may adopt engaging, real-life testimonials and interactive digital content in public service campaigns.

Conclusion

The world is on the edge of catastrophic environmental distress due to the depletion of non-renewable energy resources. Modeling consumers' purchase intention toward solar energy products can significantly contribute to the solution to this problem. The present study finds that advertisements can affect consumers' environmental values. Since environmental values play a consequential role in determining the behavioral intention toward solar energy products, they can be transformed by conveying a relevant message to the subject, strengthening brand memory, exhibiting exuberance elements, and being devoid of perplexity. A robust direct impact of relevant news, brand reinforcement, and stimulation on purchase intention indicates that solar energy product marketers must synthesize the synergy of ad elements. The present study focuses on a single geographical region, which may limit the generalizability of the findings to other regions with different socioeconomic and environmental contexts. The model can be further expanded by analyzing the mediating effect of other behavioral variables like usage patterns, buying motives, and personality. Moderating the impact of demographic variables like income, education level, and occupation can be assessed. Future studies may be extended to other energy-efficient products.

Authors' Contribution

Prof. (Dr.) Anand Thakur conceptualized and designed the study. Ishita Bansal conducted the data analysis, and Kamini Singla framed the study's implications.

Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript.

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Appendix

Construct	Cronbach's Alpha	Items	CFA Loadings	Source
Relevant News (RN)	0.872	The solar energy product advertisement showed me that these products have certain advantages. [RN1]	0.794	Schlinger (1979)
		From the solar energy product advertisement, I learned something about these products that I didn't know about earlier. [RN2]	0.743	
		The message in their advertisement was important to my everyday energy consumption requirements. [RN3]	0.786	
		The advertisement introduced me to solar energy products I think I'd like to try. [RN4]	0.747	
		The advertisement gave me a new idea about my everyday energy consumption requirements. [RN5]	0.640	
		The advertisement made me think that I might try these solar energy products just to see if they are as good as they say. [RN6]	0.680	
Brand Reinforcement (BR)	0.829	What they said about solar energy products was dishonest. [BR1]	0.892	Schlinger (1979)
		The advertisement made exaggerated and untrue claims about solar energy products. [BR2]	0.793	
		As I viewed the advertisement, I thought of why I would not buy these products. [BR3]	(Dropped)	
		As I viewed the advertisement, I thought the advertised brand was a dependable, reliable one. [BR4]	(Dropped)	
		As I viewed the advertisement, I thought that the solar energy product brand was good, and I wouldn't hesitate to recommend it to others. [BR5]	(Dropped)	
Stimulation (S)	0.878	The advertisement was fun to watch and listen to. [S1]	0.838	Schlinger (1979)
		The enthusiasm of the advertising is catchy - it picks me up. [S2]	0.800	
		The advertisement was playful. [S3]	0.728	
		The characters or people in the advertisement captured my attention. [S4]	0.782	
		The advertisement was exciting. [S5]	0.708	
Empathy (E)	0.563	I felt as though I was right there in the advertisement, experiencing the same thing. [E1]	(Dropped)	Schlinger (1979)
		The advertisement was very realistic and reflected my true everyday energy consumption habits. [E2]	(Dropped)	
		I liked the advertisement because it was personal and intimate. [E3]	(Dropped)	
		The advertisement was unrealistic and farfetched. [E4]	(Dropped)	
		The advertisement irritated me - it was annoying. [E5]	(Dropped)	
Familiarity (F)	0.766	I am very familiar with the advertisement. [F1]	0.869	Schlinger (1979)
		I have seen the advertisement earlier. [F2]	0.716	

Confusion (C)	0.860	The advertisement was too complex. I wasn't sure what was going on. [C1]	0.903	Schlinger (1979)
		It requires a lot of effort to follow the advertisement. [C2]	0.755	
		I was so busy watching the screen, I didn't listen to the words. [C3]	0.814	
Environmental Values (EV)	0.920	I think the current climate and environmental problems are quite serious. [EV1]	0.719	Dunlap (2008)
		The earth's natural resources, such as energy, minerals, and forests, will run out if we do not conserve them. [EV2]	0.816	
		The degradation of the climate and the environment is closely related to the daily lifestyle of human beings. [EV3]	0.885	
		Garbage pollution has affected our living and living environment. [EV4]	0.847	
		To survive, humans must live in harmony with nature. [EV5]	0.760	
		Although humans have the power to transform nature, we still have to obey the laws of nature. [EV6]	0.848	
Purchase Intention (PI)	0.924	I will buy the solar energy products advertised in the near future. [PI1]	0.703	Duffett (2015)
		I desire to buy the solar energy products that are promoted through advertisements. [PI2]	0.810	
		The advertisements increase the purchase intent of featured brands of solar energy products. [PI3]	0.802	
		Advertisements have a positive influence on my purchase decisions. [PI4]	0.809	
		I would buy the products that are advertised if I had the money. [PI5]	0.796	
		I am likely to buy some of the solar energy products that are promoted through advertisements. [PI6]	0.860	
		I plan to purchase the solar energy products that are advertised. [PI7]	0.805	
		Solar energy product advertisements have a negative influence on buying decisions. [PI8]	(Dropped)	

About the Authors

Prof. (Dr.) Anand Thakur is the Dean of the School of Management and the Head of the Department of Financial Administration at the Central University of Punjab. With over 20 years of teaching research experience, his research interests include consumer-brand relationships, green marketing, and rural marketing.

Ishita Bansal is a UGC-SRF at the Department of Financial Administration, Central University of Punjab. Her research interests include green marketing and online consumer behavior.

Kamini Singla is a UGC-SRF at the Department of Financial Administration, Central University of Punjab. Her research interests include sustainable marketing and tourists' transformative experiences.