

“Investigating the Determinants of Students’ Green Product Purchase Intention using PLS-SEM Approach.”

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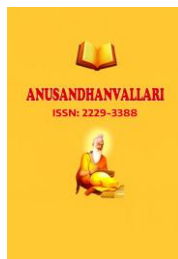
Abstract: The objective of this research was to examine students’ green product purchase motives and to observe how Attitude of students can mediate between green promotions (GP) and green purchase intention (GPI). Also, how Attitude of students can mediate social media (SM) and green purchase intention (GPI), further study focused on the direct effect of social media usage and social media marketing on green promotion (GP) and green purchase intention (GPI). We developed the new model taking attitude constraint from well-known Theory of Planned Behavior (TPB) and included some new variables Green Promotion (GP) and social media (GP). Total 78 usable responses from final year graduate students aged between 18-24 years were gathered through questionnaire, and Structural Equation Modeling (PLS-SEM) was utilized for the data analysis. The result indicated that attitude plays a vital mediating role between green promotion and green purchase intention. We also found that social media positively affects students’ green purchase motives we also concluded that social media positively affects the green promotion. Although, study does not support the mediating role of attitude between social media and green purchase intention which may limit this research and open the door for future research by the researchers with more sample size.

Keywords-Green product, Purchase Intention, Green Promotion, Social Media, Attitude, Structural equation model.

1.Introduction

Changing Environment causes various alterations in the natural environment and human-made environments, often driven by natural processes and human-caused activities. Environmental changes, such as biodiversity loss, global warming, deforestation, and pollution, are the key concern because it impacts negatively on the ecosystem and the society drastically, hence Environmental change problem has become the central point of global concern and discussion for global sustainability. Climate change is the most significant form of environmental change. It is reported by many studies that global level temperatures have been jumping rapidly because of various reasons like- Burning of fossil fuels, Industrialization, deforestation, Industrial agriculture, these all have increased the concentration of greenhouse gases (GHGs) In the atmosphere, leading to a warming climate (IPCC,2021). The intergovernmental panel on climate change (IPCC) estimated that global temperature has risen by 1.1°C since the late 19th Century, with significant regional variations.

The 2030 Agenda for Sustainable Development, which was approved by all United Naion Member States in 2015 and offers a common framework for peace and prosperity for the people and the environment, for present and in the future. The 17 Sustainable Development Goals (SDGs) from the core of this urgent appeal for action from all countries- both developed and developing- in a global partnership. They accept that elimination poverty and other forms of deprivation must be consistent with strategies that improve health and education, mitigate inequality, and economic progress for everyone, while simultaneously tackling climate change and working to protect our oceans and woods.



Among 135 targets with trend data and further insights from custodian agencies, only 17% are on track to be achieved by 2030. Close to half (48%) demonstrate moderate to severe deviations from the expected path, with 30% exhibiting minimal progress and 18% reflecting moderate progress. Worryingly, 18% have stagnated, and 17% fell below the baseline levels of 2015.

Many researchers and scientists believe that the sustainable production and consumption practice by the manufacturer and consumers can lead to combat the problem of environmental change. A recent study by (Gabriella et al., 2024) indicates that changing individual lifestyle and their consumption habits which aligned with ecological sustainability exhibits the sustainable consumption practice. According to (Murtaza et al.,2022) Sustainable consumption habits include green, environment friendly, ethical, mindful consumptions and this practice promote pro-social and pro-ecological choices for a better quality of life. Environmentally friendly products employ sustainable technologies and methods, encouraging diminished environmental impact (R.,N., Sharma.2024) Green products are created to minimize environmental pollution and resource waste during their entire life cycle. They are important for businesses striving for green growth, shaped by elements such as managerial perspectives and new media focus, which increase consumer environmental demands. (Jifeng, Hu et al.,2022).

Through green promotion activities business and marketers can create the wants for eco-friendly products and play their vital role for overall sustainable development. According to (Rehana, Kouser et al., 2024) Businesses and marketers are vital in advocating for green products via strategic green marketing and service innovation, which, when bolstered by eco-innovation, considerably improve the progress and consumer trust in sustainable products, effectively tackling environmental issues. Businesses and marketers have an essential function to advocate green products by using social media marketing to improve brand perception, highlight eco-friendly values, and deal with the environmental issues, thereby increasing consumers' likelihood of repurchasing and motivating sustainable consumption behaviors. (Tung-Lai, Hu. et al.,2024) Study by (Arvind, Nayak et al.,2024) said that the marketers and business are they key players who can motivate and promote green products by providing relevant information to consumers, their effort can lead for sustainable consumptions by the consumers. Some old studies exhibit that Businesses and marketers have an important part in advancing green products by implementing green marketing strategies, informing consumers about environmental effects, and incorporating sustainable practices throughout the marketing mix, ultimately encouraging a move towards eco-friendly consumption and production. (G., Manjunath et al.,2013) observed that Marketers and Business have key position in endorsing eco-friendly products by using creative marketing strategies, and meeting consumers' needs and demand for eco-friendly products. Study by (Pradeep et al.,2017) also conclude that Business initiatives can promote the demand of green products and can aid sustainable living and development.

Study by (K.B., Mulyono et al., 2023) Concluded that Consumers can be attracted by the marketer's incredible role of promotion and advertising activities. Marketers can highlight the importance of going green in their advertising activities through social media platform also. Which can lead to lifestyle changing decisions of consumers. Their actions, shaped by lifestyle decisions, can greatly affect the demand for environmentally conscious products, ultimately aiding in environmental conservation initiatives Another study by (Ma,Nabila et al.,2024) also supported that Consumers shows important impact on the acceptance of green products by affecting market demand through their awareness of environmental issues, perceived worth, and confidence in green assertions. Their tendencies and actions greatly influence the framework of sustainability. Consumers get impacted by green marketing strategies followed by the marketers which can lead to positive buying for green products and showing their commitment towards environmental sustainability. And their decisions can promote the companies for unstoppable sustainable practices. According to (Yashodhan et al.,2024) Consumers have a vital part in buying green products by indicating environmental awareness, reacting to eco-labels, and being

swayed by green advertising. Their readiness to alter consumption habits greatly affects the demand for eco-friendly products, encouraging sustainability. (R., M., U., M., K., Rathnayaka et al.,2020)

Most of the study in the field of consumer intention for green purchase intention and behavior used the planned behavior theory (TPB) model by (Icek Ajzen.1991) which include the consumers' attitude as a determinant construct of green product purchase intention and behavior. Researchers (Mohammad et al.,2014) in his study highlighted that Consumers always hold an important position by showing favorable attitudes toward green products, accelerating the demand for eco-friendly alternatives. Businesses, consequently, can enjoy advantage of this trend by launching sustainable products, increasing their market share while helping in environmental conservation. Consumers have a significant impact on promoting green product intention by showing sustainability in their buying alternatives. In turn, businesses always need to modify their strategies to cope up with these changing consumer preferences, creating a market environment that exhibited environmental accountability and green buying. (Kaledio, Egon et al.,2023)

Social media influences the purchasing of eco-friendly products. (Chiyin, Chen et al.,2024) social media highly impacts intentions to purchase green products by increasing consumer trust and involvement. (Dario, Sipos. 2024) Study by (Ignasius et al.,2024) emphasized that the use of social media significantly contributes to encouraging green consumption, affecting obstacles to the intention to purchase green products. It proposes future studies on how digital media can improve confidence in and justification for green products.

Most of the green purchase intention and green marketing research has focused on the general population of consumers, not on specific groups like students. This study taken Students Specific age population between 18 to 24 years in small state like Chhattisgarh where such studies have never been conducted in this specific age group of consumers. As a sample Studies based on the theory of planned behaviour have extensively studied consumer attitudes, subjective norms, and perceived behavioral control over purchasing green across diverse populations. Consistent with this, previous inquiries on green promotion and social media marketing have so far been performed at the level of consumers, not segmenting students as a group of mind and behavior.

Yet, university students are a distinct and powerful group with greater environmental concerns, heavier social media usage, and developing pro-sustainability attitudes. There is a research scarcity on how marketing tools can influence green purchase in the student population that is now considered to play a crucial role as future consumers and opinion leaders, and how students will be able to respond to green promotion in their attitude and purchase intention. Hence, the current research addresses this void by concentrating solely on students and by examining the mediating effect of attitude between green promotion, social media and green purchase intention in the context of this population.

The novel contribution of this study will be (1) Examine the Mediating role of Green Attitude (AT) between green promotion (GP) and Green Product Purchase intention. (2) Examine the Mediating role of Green Attitude (AT) between social media (SM) and Green Product Purchase intention. (3) Social media marketing and usage effect on green promotion and green purchase intention. To fill the gap, we are taking the construct Attitude from the Theory of planned behavior (TPB) model given by Icek Ajzen.1991 with some added variables like green promotion and social media marketing and usage.

In this regard we have found following research questions- (1) How can green attitude (AT) mediate the role between green promotion (GP) and green product purchase intention? (2) How can green attitude (AT) mediate the role between social media (SM) and green product purchase intention? (3) How does social media (SM) affect the green product purchase intention? (4) Does social media affect green promotion?

1.2 Background of the Study

Rapid degradation of environment, climate variations and unsustainable patterns of consumption have raised alarming global concerns about ecological sustainability. Purchases are vital in contributing to an environmentally friendly market and they are significant to consumers' voting behaviour for environmentally responsible markets, especially in young generations. Green goods and sustainable consumption patterns have thus attracted more attention from the academics, policy makers and the marketing experts. By green advertising and social media marketing, enterprises and businessmen can affect consumers' environmental consciousness and purchase decision.

Students constitute a strategically important group as they are both current consumers and future decision makers. Because students have easy access to social media and they are frequently exposed to green advertising messages, it may have an influence on their attitudes and intentions toward consuming eco-friendly products. Based on the Theory of Planned Behavior (TPB), this study explores the effect of green promotion and social media on students' green purchase intention with the mediating role of attitude as a focal point.

1.3 Research Gap of the Study

Despite the fact there is a plethora of TPB-based research on green purchase intention, there are still several gaps. Firstly, to the best of our knowledge, most of the previous research concentrated on conventional green marketing variables, such as green product, green price, green place and green people, and only a few studies have considered green promotion and social media marketing together based on TPB model. Secondly, scant studies investigated mediation specifically in the context of green promotion and social media influence.

Third, extant research predominantly focuses on large cities or developed regions, and there lacks empirical evidence from medium/small sized cities, especially from developing countries like India among student populace. Last, a number of studies focus on intention but fail to investigate adequately the psychological process through which marketing stimuli influence intentions. To fill in these gaps, this research enhances TPB by integrating green promotion and social media and provides new empirical findings on students' green purchase behaviour.

1.4 Objectives of the Study

The primary objectives of the study are as follows:

1. To examine the effect of green promotion on students' attitudes toward green products and to assess the direct impact of students' attitudes on green product purchase intention.
2. To analyze the influence of social media usage and marketing on green promotion and green product purchase intention.
3. To investigate the mediating role of attitude between green promotion and green product purchase intention.
4. To examine whether attitude mediates the relationship between social media and green product purchase intention.

2. Review of Literatures

The subsequent subsections offer a theoretical basis that aids in the creation of literature support and hypotheses for the research.

2.1 Theory of planned behavior (TPB)

The theory of planned behavior (TPB) (Ajen, 1991) which is a psychological model shows how personal attitudes, subjective norms, and perceived behavioral control can affect intentions and ensuing behaviors. This model has been utilized in multiple areas, such as health, environmental sustainability, and social security involvement, showcasing its adaptability and significance in comprehending human behavior. The planned behavior theory suggests that behavior is predicted by intention, which is influenced by attitude towards the behavior, subjective norm, and perceived behavioral control as a formative construct of intention and behavior (Michael et al., 2021). Nevertheless, few studies are seen to examine consumers' intention for green product purchase taking green promotion and social media marketing and usage as a construct formatting the green attitude and green product purchase intention.

Thus, the present research included one of the key constructs of TPB model, Attitude as a mediator variable between green promotion and social media marketing and usage to determine segmented population of students' in developing country as there are only a few studies that have been carried out in the small states of developing nation also it was found that the past studies have not used attitude's mediating role for green product purchase intention which is included in this research.

Current study included green promotion (GP), social media marketing and usage (SM) as a new construct taking as independent variables and independent variable Attitude from the TPB model to determine the dependent variable green purchase intention of students' aged between 18 years to 24 years.

2.2.1 Green Promotion

Green promotion deals with marketing techniques that highlight eco-friendly products and methods. It incorporates the use of sustainable raw materials, recyclable packaging, and informing consumers about the benefits of green products, with the ultimate goal of appealing to environmentally aware consumers and encouraging sustainable consumption. (Harvinder, Singh et al., 2020). According to (Khair, Cong et al., 2023) Eco-friendly promotional tools favorably impact green brand equity and the intention to make green purchases. (Sudhir, Sachdev, 2015) resulted that Eco-friendly promotion greatly affects consumer attitude regarding sustainable products by increasing awareness and perceived advantages. (Gandhi, Ankit et al., 2013) examined that Green advertising greatly impacts on the attitude of consumers by resonating with their environmental worries and ambitions. Favorable attitudes toward green advertising boost consumers' intentions to buy green products, illustrating the success of these promotional tactics in influencing consumer behavior moreover, The connection between green attitudes and the intentions to buy green products is important, as shown by multiple studies. Environmental concerns and values shape green attitudes, which has significant impact on consumers' intentions to buy eco-friendly products. Similarly, (Piyanoot, Kamalanon et al., 2022) found that Attitude toward eco-friendly products greatly influences the intention to purchase green items, acting as the strongest precursor compared to others such as perceived consumer effectiveness and environmental awareness. Green promotion greatly affects consumer concern regarding environmental protection, as it corresponds with their values and promotes sustainable buying habits (Krishanveer, Singh, 2021). Thus, we formulate following hypothesis:

H1a. : Green attitude has a positive and significant mediating effect on the relationship between green promotion and green product purchase intention.

H1b.: Green Promotion Positively affects green attitude.

H1c.: Green attitude positive and significant effect on green product purchase intention.

2.2.2 Social Media

Social media includes online platforms and user-created content that enable individuals to interact and work together through mobile devices, computers, and various communication technologies (Todd, L., et al.2019) and various studies reported that Social media serves as a widely used platform for exchanging ideas and information. Entrepreneurs utilize it to find, engage with, and sell to their intended customers. Social media engagement affects green buying intentions through peer influence stemming from user-generated content, which notably boosts purchase intentions through environmental self-efficacy and positive moral emotions, in contrast to marketer-generated content, which demonstrates no empirical proof of comparable effects. Social media has a major effect on green promotion by boosting individuals' intentions to make eco-friendly purchases and raising awareness of environmental concerns (Rizky et al.,2024). Social media influencers play a crucial role in promoting green initiatives by influencing product values and informing consumers about the ecological advantages of products (Rifai et al.,2024) Social media has a substantial impact on green promotion by allowing brands to participate in green marketing endeavors that influence consumers' views (Qing, Tang. 2023) thus we formulate following hypothesis:

H2: Social media positively affects green promotion.

Social media effectively encourages pro-environmental actions by shaping attitudes and enhancing awareness regarding environmental concerns (R., Thanya., S., C. 2023) Social media marketing has a considerable effect on consumer perceptions of green products. The research revealed that although comprehension of green products did not influence attitudes, engagement via electronic social media and awareness of value during product purchases positively affected consumer attitudes (Budi, Sutedjo et al.,2023) Study by Camelia, Delcea et al.,2019) reported that Social influence, especially from peers on social media platforms, significantly impacts consumers' perceptions of green products. Greater exposure to online media can result in a faster acceptance of eco-friendly products. Thus, the utilization of social media is considered an important factor that may affect green promotion and green attitude and influence green product purchase intention it lead to formulate following hypothesis:

H3 : Social media positively affects green attitude.

H4 : Green attitude has a positive and significant mediating effect on the relationship between social media and green product purchase intention.

H5 : Social media has a positive and significant effect on green product purchase intention.

Conceptual Framework

This research is an extension of the Theory of Planned Behavior by considering green promotion and social media as determinants of green purchase intention and attitude as a mediator. The model suggests that green promotion and social media exposure affect students' environmental attitudes and in turn their intention to buy green products.

Hypothesized Relationships are as follows:

Green Promotion → Attitude → Green Purchase Intention

Social media → Attitude → Green Purchase Intention

Social media → Green Promotion

Social media → Green Purchase Intention

Theoretical model Marketing stimuli are presumed to influence cognitive and affective evaluations (attitude) prior to behavioral intention among students.

3. Method of Research

3.1 Research Design

The research is based on the results of a survey and adopted a quantitative cross-sectional approach to analyzing the determinants of students' intention to purchase green product. Based on Theory of Planned Behavior (TPB), this study modified TPB model by adding Green Promotion (GP) and Social Media (SM) as antecedents and Attitude (AT) as a mediator. The study attempted to examine the proposed latent constructs relations.

3.2 Data Collection and Sampling

This research is carried out using both primary data and secondary data, the collection of primary data was done through the questionnaire and various relevant websites, research papers, reports were used for secondary data.

A self-administered questionnaire was sent online over a period of four weeks to the final year graduation students of selected college affiliated with Pandit Ravishankar Shukla university in India utilizing the judgmental sampling method. Our research employed judgmental sampling because it is more time-efficient, cost-effective, and provides direct access to the specific population we are interested in. The questionnaire was sent by the college management to the students' official Whatsapp group created and maintained by college management and also by E-mail and they were instructed to fill in the questionnaire. We got 52 % response rate from students pursuing graduation from the college. Data was further filtered and all the questionnaires with missing information were excluded. In this way we included 78 valid responses for further data analysis out of 95 responses received.

The minimum sample size was ascertained based on 'the 10-times rule' for PLS-SEM, which the sample size should be equal to or larger than 10 times of the largest number of structural paths directed at a particular latent construct (Hair et al., 2014). In the postulated model, the largest number of paths pointing to a construct is three; therefore, the minimum sample size required is:

$$N \geq \text{Maximum number of structural paths} = 10 \times 3 = 30$$

As this research received 78 valid responses, the sample size meets the minimum requirement for conducting PLS-SEM analysis. This rule has been adopted widely in behavioral and marketing research for exploratory structural modeling.

3.3 Research Tools

Data were collected through a self-administered structured questionnaire in English. The instrument had two parts:

Demographic data: gender, age, and education.

Measure Items for the Latent Constructs such as Green Promotion, Social Media, Attitude and Green Purchase Intention

All items of the constructs were assessed on a 5-point Likert scale with 1 = strongly disagree to 5 = strongly agree. Six items were deleted because of ambiguity or weak loadings after the initial screening, which left a total of nine indicators.

3.4 Measurement of variables

The study operationalized four latent variables:

Green Promotion (GP)

Social Media (SM)

Attitude (AT)

Green Product Purchase Intention (GPI)

Cronbach's alpha, composite reliability (CR) and average variance extracted (AVE) were used to test reliability and validity. All constructs were above recommended threshold values ($\alpha > 0.70$, CR > 0.70 and AVE > 0.50), indicating sufficient internal consistency and convergent validity. Discriminant validity was established by Fornell-Larcker and heterotrait-monotrait (HTMT) criterion tests, and multicollinearity was examined using variance inflation factor (VIF) values.

3.5 Data Analysis Techniques

Partial Least Squares-Structural Equation Modeling (PLS-SEM) analysis was performed using SmartPLS version 4. A twostep analysis was performed Measurement model testing including assessment of reliability, convergent validity, discriminant validity and model fit.

Evaluation of the structural model, determination of path coefficients, coefficient of determination (R^2), and hypothesis testing. A bootstrapping procedure with 1,000 resamples was used to test the significance of direct and mediating effects. Model fit statistics such as the SRMR and NFI suggested that the model fit the data adequately.

4. Result

4.1. Evaluation of Measurement Model

Table 1 represents the socio-demographic data which exhibits the gender, age and education of the respondents and its percentage. Figure 1 presents the outer loading which determines an indicator's contribution to its assign construct the value of outer loading must be more than 0.07 to. In our model those indicators which had value less than 0.07 were eliminated, total six indicators were eliminated and nine indicators were included in measurement model. Cronbach's coefficient alpha was utilized to assess the reliability of the dataset, and composite reliability was employed to evaluate the internal consistency of the constructs. All constructs demonstrated Cronbach's alpha values exceeding 0.700 and exhibited no reliability issues (Anderson et al. , 2010). Table 2 illustrates that the Cronbach's alpha value for each construct surpasses the threshold value of 0.700. Composite reliability (CR) varies between 0.771 and 0.906, which are above the 0.70 threshold value (Hair et al. 2014), indicating robust reliability among processes. As a result, the survey instrument is valid across all aspects of research design.

Table 3 presents The variance inflation factor (VIF) for each item ranges from 1.459 to 4.713, which is below the threshold value of 5.0, indicating that the structural model exhibits no multicollinearity and no adverse effects between items or predictors consequently, each construct is statistically unique and demonstrates that discriminate validity is adequate.

The diagonal values in Table no.4 align with the row and column values, demonstrating sufficient discriminant validity. Table 5 displays the SRMR value below 0.08 and the NFI value above 0.08, both of which meet the threshold criteria for model fitness and show how well the theoretical model fits.

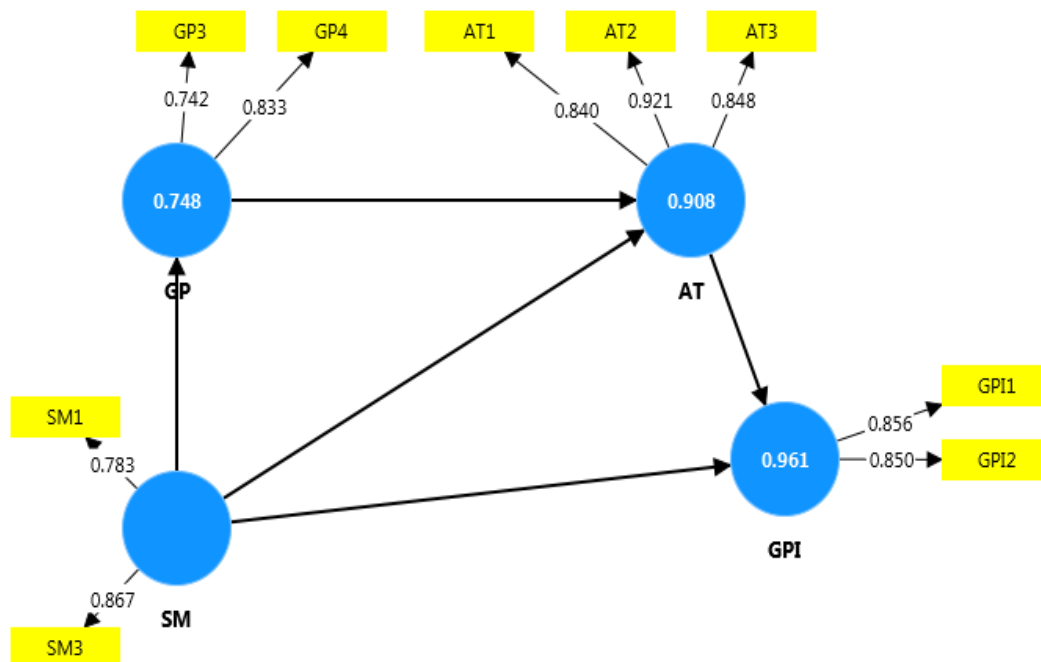


Fig. 1. Proposed a new conceptual model of Students' Green Product Purchase Intention

Table 1: Socio-demographic data

Characteristics	Frequency	Percentage
Gender		
Male	32	41
Female	46	59
other	0	0
Age		
18-21 years	59	75.6
22-24 years	19	24.4
Education		
Doing UG Course final year	78	100
Total Respondents	78	100

Table 2 : The evaluation of the measurement model (reliability, validity)

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
AT	0.903	0.906	0.903	0.757
GP	0.764	0.771	0.766	0.622
GPI	0.842	0.842	0.842	0.727
SM	0.808	0.814	0.811	0.682

Table 3 : Variance inflation factor (VIF)

	VIF
AT1	2.929
AT2	3.07
AT3	2.676
GP3	1.617
GP4	1.617
GPI1	2.123
GPI2	2.123
SM1	1.853
SM3	1.853

Table 4 : The findings of discriminant validity, Fornell-Lacker, and HTMT criterion.

<i>Heterotrait Monotrait Ratio (HTMT)</i>				
	AT	GP	GPI	SM
AT				
GP	0.961			
GPI	0.938	1.046		
SM	0.714	0.862	0.824	
<i>Fornell-Larcker Criterion (FLC)</i>				
	AT	GP	GPI	SM
AT	0.961			

GP	0.934	0.789		
GPI	0.87	0.825	0.853	
SM	0.712	0.865	0.822	0.826

Table 5: Model fitness

	Saturated model	Estimated model
SRMR	0.04	0.044
d_ ULS	0.071	0.086
d_ G	0.132	0.157
Chi-square	39.833	45.645
NFI	0.916	0.904

4.2. Structural path model to examine hypothesized relationships

The structural model is the next step for hypothesis testing, Figure 2. Table 6.1 presents Path Coefficients-Mean, STDV, T value, P value. Hypothesis of theoretical model is accepted If P value is between 0.00 to 0.05. Table 6.2 Presents the R^2 and Adjusted R^2 value more than 20% value of R^2 is considered significant for consumer behavior studies in this study all the value of R square and R square adjusted is more than 20% or .20.

H1b.:GP -> AT

Green Promotion Positively affect green attitude as the P value is 0.00

H1c.:AT -> GPI

Green attitude positive and significant effect on green product purchase intention as the P value is 0.00

H2. :SM -> GP

Social media positively affects green promotion as the P value is 0.00

H3. : SM -> AT

Social media does not positively affects green attitude as the P value is above 0.05 which is 0.147.

H5. :SM -> GPI

Social media has a positive and significant effect on green product purchase intention as the P value is 0.04 which lies under the threshold limit between 0.00 to 0.05.

4.3. Testing for mediation: indirect and total effects

Table 7 Presents the Results of the mediating investigation Specific Indirect Effect H1a. : GP -> AT -> GPI Green attitude has a positive and significant mediating effect on the relationship between green promotion

and green product purchase intention as the P value is under the threshold limit 0.00. But, H4. :SM -> AT -> GPI Green attitude has a no positive and significant mediating effect on the relationship between social media and green product purchase intention as the P value is 0.125 which is more than threshold limit of P value 0.00-0.005.

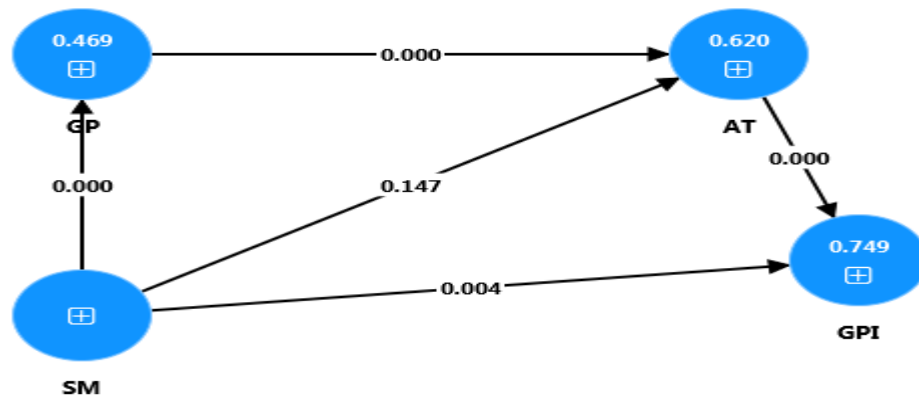


Fig.2.Hypothesis testing Theoretical Model

Table 6

Table 6.1 Path Coefficients- Mean, STDV, T value, P value

	Original sample (O)	Sample mean (M)	Standard Deviation	T statistics (O/STDEV)	P values	Result
AT -> GPI	0.677	0.655	0.085	7.987	0	Supported
GP -> AT	0.681	0.665	0.089	7.695	0	Supported
SM -> AT	0.145	0.133	0.1	1.453	0.147	Not Supported
SM -> GP	0.685	0.674	0.139	4.946	0	Supported
SM -> GPI	0.266	0.272	0.092	2.905	0.004	Supported

Table 6.2

R square and R2 Adjusted

	R2	R2 Adjusted
AT	0.607	0.583
GP	0.461	0.465
GPI	0.741	0.712

Table 7

Results of the mediating investigation Specific Indirect Effect

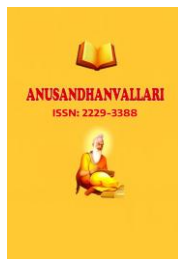
	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Result Supported
GP -> AT -> GPI	0.461	0.44	0.099	4.68	0	Yes
SM -> AT -> GPI	0.098	0.087	0.064	1.535	0.125	No

5. Discussion & Implications

The primary focus of this research was to examine the determinant of students' green product purchase intention using attitude constraint of TPB mode aliening it with some new constraint Green promotion(GP) and Social Media (SM) to make new extended theoretical model. It was found that model was fit to examine the relationship between these constraints and Green product purchase intention (GPI). We examine the mediating effect of attitude with green promotion and we found that it play a vital mediation role between green promotion and green purchase intention (GPI) whereas it does not mediate the social media and GPI. Also, it validate that consumer positive attitude effect green product purchase intention, when consumers are positive towards the use and price of green products they exhibits positive intention to buy green products it support the study by Evan, Himawan. (2019) which concluded that Green brand attitude has a considerable impact on green purchase intention, This indicates that improved consumer attitudes towards green brands result in a greater probability of buying environmentally friendly products. Prior research, also corroborates this conclusion, highlighting that favorable consumer attitudes towards green brands boost their intention to purchase these products. However, we use the novel construct Green promotion and Social media which to determine green purchase intention, and we found that social media positively affects the green promotion.

Social Learning Theory suggests that people, especially those from Generation Z, are affected by their peer networks on social media, emulating environmentally responsible actions when they view these behaviors as social norms, thus improving their intentions to make green purchases (Priya, Sethuraman. 2023) our study also supported this as we found that the Social media has positive and significant effect on green product purchase intention.

The current study offers important insights from both a theoretical and a managerial perspective. This research has reinforced the well-known socio-psychological framework, namely the Theory of Planned Behavior (TPB) and its extension, in assessing segmented consumer population of students' intentions to make green purchases in small states and town with low level of literafy rate. The findings of this study may assist scholars in exploring additional factors that could impact consumers' green purchasing behavior. Study by (Júlio, Cézar et al., 2024) resulted that Marketers require green marketing to encourage sustainable consumption and improve environmental awareness. Our study focused on social media marketing and green promotion which exhibits the importance of green marketing for marketers. Study can be useful for marketers to make their marketing decision. Moreover, study can be used for further research by researchers with more sample size.



5. Research Conclusion, Limitations , Scope for Future Research

6.1 Conclusion

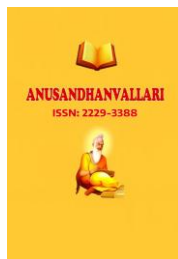
The present research study added some new constraints along with one constraint from TPB model to make new theoretical model and we found the model relevant to determine students green purchase intention. We conclude that attitude plays a vital role to mediate between green promotion and green purchase intention of students aged between 18-24. We studied the students' population considering the dual characteristics of students' being present and future buyer. we took social media as an independent variable as it is mostly used by youth. Through structural equation model using PLS-SEM we found that social media usage and social media marketing effects students' green purchase intention we also found that social media positively affect the green promotion. Although, study does not support the mediating role of attitude between social media and green purchase intention which limits this research and open the door for future research by the researchers with more sample size. This study was novel in the sense that according to our knowledge it was the first to examine such breadth in students' green product purchase intention. First, our findings also confirmed the positive impact of green promotion on students' favorable attitudes toward green products, suggesting that a well-prepared promotional program would positively influence environmental-related perceptions. Second, results proved that social media had a positive impact on green promotion and green product purchase intention, revealing the increasing popularity of digital platforms with which to promote sustainable consumption behavior among students.

Third, attitude was found to be a significant determinant of green product purchase intention, thus reinforcing the applicability of TPB in the domain of green purchases. Fourth, the mediation analysis indicated that attitude serves as significant mediator of the relationship between green promotion and green purchase intention, suggesting that promotional activities affect purchase intention through changing attitude. However, the goal to assess the mediating effect of attitude in the relationship between social media and green purchase intention was not fully accomplished, since this hypothesis was not supported. On reading, the study successfully achieved the objectives and gave both theoretical and practical useful takeaways.

6.2 Limitation of the Study

Although the present study makes significant theoretical contributions, it has several limitations that should be noted with respect to interpreting the results. the study applied a cross-sectional research method, which limits the inference of causation among the studied variables. Longitudinal studies are more appropriate to reflect changes over time in attitudes and green purchase intentions. Comparatively small number of respondents participated in the study, and a non-probability sampling method, judgmental sampling, was used for the study; the participants comprised only of final year undergraduate students from a few institutes. This may limit the applicability of the findings to other populations in terms of demographics, educational background, or location. The study examined self-reported green purchase intentions rather than actual buying behavior, which may be biased implicating potential overestimation of real green purchasing behavior. Study only included one element of the Theory of Planned Behavior — attitude — as the mediator, leaving two other potential relevant variables, subjective norms and perceived behavioral control.

Finally, the research was carried out in a small-city setting in a developing country without considering the larger cultural, economic and institutional influences. These limitations call for caution in the interpretation of findings and offer interesting future research directions.



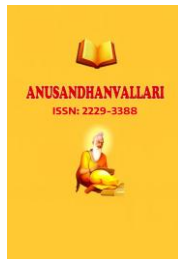
6.3 Scope for Future Research

Future research could utilize longitudinal methods to investigate changes in students' green attitudes, promotional exposure and purchase intentions over time for stronger inference of causality. Authors should attempt to recruit larger and more diverse samples through the application of probability sampling techniques, which will include individuals from varied university, discipline, age, and region backgrounds to strengthen the generalizability of the findings. More future studies may further extend the theoretical framework by including other constructs of the Theory of Planned Behavior such as subjective norms and perceived behavioral control and other potential factors including environmental concern, green trust, price sensitivity, perceived consumer effectiveness, and environmental knowledge. It could be of interest for researchers to investigate the effect of green promotion or social media on actual green purchase behavior with behavioral information such as experiments, purchase data, or other methods to overcome the intention–action gap. Comparative and cross-national studies between developed and developing countries would enhance the understanding of how cultural, economic and institutional factors impact on green purchase behavior and the success of green marketing practice.

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