Impact of social media influencers on promoting sustainable behavior among Gen-Z

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ABSTRACT

Social media influencers have become strong agents in influencing the behavior of consumers, especially those in Generation Z, a population that is greatly active online. This report studies the influence of social media influencers in driving sustainable behavior among Gen-Z, taking into consideration how they contribute to promote responsible consumption, and ecologically conscious attitudes. Using platforms such as Instagram, TikTok, and YouTube, influencers craft compelling stories that attract young people, generate awareness, and motivate action. The research analyzes core elements such as authenticity, relatability, and perceived credibility that influence the success of influencer-led sustainability campaigns. It also examines the factors that influence Gen-Z perception of influencers advocating sustainability. The study indicates that Influencer Credibility (IC) , influencer engagement and content strategy play a major role in raising green purchase intention additionally customer attitude, subjective norms and perceived behavior has a long-term effect on green purchase intention . The report highlights the power of influencer marketing as a force for social change and identifies a need for responsible promotion practices to drive meaningful and sustained behavioral change among Gen-Z.

Keywords: Social media influencers, sustainability, Generation Z, digital advocacy, eco-conscious consumerism, sustainable behavior.

1. INTRODUCTION

Social media growth has changed how people view and access information, interact with content, and buy products. Out of the several digital marketing campaigns, influencer marketing stands as one of the most potent techniques in transforming buyer behavior. Influencers in social media are personalities who enjoy an enormous number of followers on online platforms. These influencers contribute heavily to changing minds, fads, and living habits. One of the fields where their impact is increasingly apparent is in sustainable behavior promotion. As climate change, environmental degradation, and ethical consumption concerns rise, influencers have emerged as prominent voices for sustainable behaviors, especially among Generation Z (Kapitan & Silvera, 2016).

Generation Z, who are born between the mid-1990s and early 2010s, are characterized by greater sensitivity towards the environment and supportive of those brands that promote ethics and sustainability. In contrast to other generations, Gen-Z proactively searches for information on social media platforms like Instagram, TikTok, and YouTube, where influencers offer suggestions on sustainable fashion, zero-waste living, green products, and ethical consumerism (Lou & Yuan, 2019). Because of their relatable characters and direct interaction with their audience, influencers are seen as more genuine and credible than traditional ads. This genuineness allows them to influence meaningful behavioral change, making sustainability more desirable and within reach for younger generations (Schouten et al., 2020).

The influence of influencers in sustainable behavior is highly due to the fact that they are able to produce interesting content that their followers can relate to. Through their personal experiences, product efficacy demonstration, and sustainability advocacy, influencers make green living more feasible and appealing. Furthermore, they frequently partner with like-minded brands whose values complement theirs, which enhances the value of sustainability in contemporary consumerism. However, despite their positive impact, influencer-driven sustainability campaigns are not without challenges. The rise of greenwashing, where brands falsely claim to be environmentally responsible, raises concerns about the credibility of influencer endorsements. Additionally, there is a fine line between genuine advocacy and profit-driven promotions, which can sometimes dilute the authenticity of sustainability messaging (De Veirman et al., 2017).

2. LITERATURE REVIEW

2.1 Consumer Attitudes Towards Sustainable Fashion

Consumer attitudes toward sustainable fashion reflect their perceptions, beliefs, and emotions regarding clothing produced through environmentally friendly and ethical means. These attitudes are influenced by multiple factors, including environmental awareness, ethical considerations, and individual values (Chen & Burns, 2006). Research suggests that individuals who recognize the environmental consequences of the fashion industry—such as pollution and excessive waste—are more likely to develop a favorable outlook toward sustainable fashion (Niinimäki, 2010).

One of the major drivers of positive consumer attitudes is the perceived benefits of sustainable fashion, which include durability, superior material quality, and the ethical responsibility associated with supporting environmentally conscious brands (Hiller Connell, 2011). Consumers increasingly resonate with the principles of "slow fashion," a movement that encourages mindful purchasing and prioritizes quality over quantity, leading to a shift in consumption behavior (Fletcher, 2007).

Additionally, social and cultural factors play a critical role in shaping consumer attitudes. Media influence, peer opinions, and prevailing societal trends significantly impact individuals' willingness to embrace sustainable fashion practices (Gwozdz et al., 2017). Despite growing awareness and an increasing inclination toward sustainable fashion, a gap often exists between consumers' stated preferences and their actual purchasing behavior. This "attitude-behavior gap" can be attributed to various challenges, such as skepticism regarding brands' sustainability claims and the perceived inconvenience of shopping for sustainable products (Johnstone & Tan, 2015).

2.2 Green Purchase Intention

Green purchase intention demonstrates consumers' preference for choosing green products over traditional ones. It is influenced by a variety of factors, such as environmental awareness, moral values, and the perceived benefits from sustainable consumption (Chan, 2001; Lee, 2008). As consumers increasingly realize the importance of ecological issues, their green purchase intention becomes more powerful, rendering sustainability an important influencing factor in their choice behavior.

Generally, green purchase intention is a precursor to green purchasing behavior at a psychological level. Consumers who positively look for environmentally friendly certifications like eco-labels or sustainability approval show a stronger intent to reduce their environmental footprint (Joshi & Rahman, 2015). This intention manifests in informed purchasing decisions where consumers choose to buy products reflecting their environmental ethics.

In addition, the likelihood of creating a green purchasing intention increases among consumers if they believe a product will effectively assist in the preservation of the environment. The principle of perceived consumer effectiveness—

presuming one can make a substantial impact through what they do—is a critical driving force for forming this intention (Tan & Lau, 2011). Whenever people are encouraged to be contributors to sustainability, their intention to buy environmentally friendly products greatly grows.

2.3 Subjective Norms

Subjective norms refer to the social influences that shape an individual's behavioral intentions, particularly the perceived pressure from family, friends, and society to engage in or avoid certain behaviors (Ajzen, 1991). In the context of sustainable consumption, subjective norms play a vital role in influencing consumers' intentions to purchase eco-friendly products. When individuals observe that sustainable practices are endorsed and encouraged by their social circle, they are more likely to develop a positive inclination toward adopting such behaviors (Han et al., 2010).

Research suggests that the opinions of close social groups significantly affect consumers' decision-making processes. For instance, individuals who perceive strong social approval for purchasing sustainable fashion or eco-friendly products are more inclined to make green purchases themselves (Paul et al., 2016). The influence of subjective norms is particularly strong among younger generations, such as Gen Z, who are highly engaged in social media and digital communities where sustainable behaviors are actively promoted.

Additionally, subjective norms extend beyond direct peer influence to include broader societal and cultural expectations. Media representation, influencer endorsements, and governmental campaigns promoting sustainability contribute to shaping individuals' perceptions of what is socially desirable (Yadav & Pathak, 2017). As sustainable behavior gains mainstream acceptance, individuals may feel a stronger obligation to conform to these expectations, further reinforcing their intention to adopt eco-friendly consumption habits.

2.4 Perceived Behavioral Control

Perceived behavioral control (PBC) is defined as a perception of one's capability to conduct a certain behavior depending on resources, information, and external factors (Ajzen, 1991). When it comes to sustainable consumption, PBC can determine whether customers follow through on their intention to buy environmentally friendly products. When people believe that they have enough resources, access, and control over their shopping choices, they are likely to adopt sustainable behaviors (Kim & Han, 2010).One of the most important determinants of PBC is the ease or difficulty of adopting sustainable consumption behavior. For instance, if consumers perceive that buying sustainable fashion or green products is effortful, costly, or not readily available, they are less likely to act on their green purchase intentions (Zhao et al., 2014). Conversely, however, when people feel that sustainable options are available and easy to use, they are more likely to do so.

In addition, online platforms and social media have amplified consumers' perceived control by making them more accessible to information on sustainable brands and green alternatives. The proliferation of online marketplaces, ethical shopping guides, and eco-certifications has assisted in closing the intention-behavior gap, making it convenient for consumers to take action on their environmental concerns (Paul et al., 2016).In addition, financial considerations influence PBC. Customers who view environmentally friendly products as expensive or expensive to purchase are likely to have a lower level of perceived control over purchasing environment-friendly products (Yadav & Pathak, 2017). Interventions such as promotions, subsidies for environmental products, and second-hand marketplaces can support perceived behavioral control by minimizing expenses.

2.5 Influencer Credibility

Influencer credibility is an important factor to influence consumer attitudes and behaviors toward sustainable consumption. Three factors determine credibility, namely, expertise, trustworthiness, and authenticity (Ohanian, 1990). When influencers are seen as knowledgeable and truly passionate about sustainability, their suggestions are more likely to have an impact on their followers' buying behavior (Lou & Yuan, 2019).

Trustworthiness is an important element of influencer credibility. Customers are more inclined to adopt sustainable behaviors when they believe that the influencer is truthful and transparent in what they present (Djafarova & Rushworth, 2017). Empirical evidence indicates that influencers who candidly expose their sustainable lifestyle habits and offer proof, for instance, in the form of certification or personal testimony, gain followers' trust and engagement with sustainability practices (Jin et al., 2019).Furthermore, authenticity in influencer marketing heavily influences consumer attitudes. Influencers who share authentic personal stories, challenges, and real views of sustainability tend to resonate with people more on social media than others who just push eco-products as sponsorship (Schouten et al., 2020). Lack of authenticity can trigger mistrust and demote the performance of the message of the influencer (De Veirman et al., 2017).

Therefore, credibility of influencers is a major promoter of sustainable practices among Gen-Z, as they heavily trust and relate with familiar voices while making buying decisions regarding eco-friendly fashion, products, and lifestyle (Munnukka et al., 2019).

2.6 Influencer Engagement and Content Strategy

In addition to credibility, consumer adoption of sustainable behavior is further influenced by social media influencers' engagement strategies and content creation techniques. Influencers who are effective in engaging their audience, interactive storytelling, and content creation through visually appealing elements have a more influential effect on the sustainable buying habits of their followers (Casaló et al., 2020).Two-way communication fuels engagement. Social media, unlike conventional advertising, enables influencers to personally reply to comments, have live Q&A sessions, and design polls to know their audience's opinions regarding sustainability (Hudders et al., 2021). Such interaction promotes a sense of community and shared responsibility, thus encouraging followers to engage in sustainable behavior.

Additionally, the format of the content is pivotal in promoting sustainability. Influencers utilizing short video formats, behind-the-scenes updates, and instructional posts are more successful in persuading their following regarding the relevance of sustainable choices (Huang & Su, 2021). For instance, Instagram Reels and TikTok videos for DIY sustainable fashion advice or eco-friendly product endorsements receive high levels of engagement from Gen-Z customers (Wang et al., 2022).

Moreover, influencers who partner with brands that share their values further reinforce consumer confidence. When influencers do brand collaborations with companies whose sustainable practices are transparent, followers find the endorsement to be more authentic and credible (Kapitan & Silvera, 2016).Therefore, influencers' action strategies and content decisions are key to closing the awareness-action gap to influence consumers to adopt sustainable behavior into their everyday lives.

OBJECTIVE

The primary objectives of this study are:

1.   **To analyze the role of social media influencers in promoting sustainable behaviors among Gen-Z.**

2.   **To examine the factors that influence Gen-Z's perception of influencers advocating sustainability.**

3.   **To provide recommendations for leveraging influencer marketing as a tool for sustainable awareness.**

This report seeks to explore the growing impact of social media influencers in promoting sustainable behavior among Gen-Z. It will analyze the effectiveness of influencer-driven sustainability campaigns, examine the key factors that influence Gen-Z's perception of sustainability messaging, and identify potential challenges associated with influencer marketing in this domain. By assessing real-world examples and relevant case studies, the study aims to provide insights into how influencer marketing can be leveraged as a tool for fostering long-term sustainable habits.

3. Methodology

3.1 Target Population

The participants in our study included students currently enrolled in various universities across India. The students included in the survey were within the age range of 18 to 30 years. University students were selected as the target population because they are more likely to be influenced by social media and have a greater awareness of sustainable practices. Prior research has indicated that educated individuals better comprehend sustainability issues and provide reliable responses (Hedlund, 2011; Han et al., 2010; Alwitt and Pitts, 1996). Another reason for choosing this age group is that Gen-Z individuals actively engage with social media influencers, making them an ideal sample for understanding how influencer marketing affects sustainable behavior. The participants were chosen using random sampling. A structured questionnaire was prepared and distributed online by sharing the link through various platforms, ensuring ease of access and increased response rates.

3.2 Sample Size and Composition

Following Krumpal (2013), data were gathered anonymously, and respondents were assured confidentiality to minimize social desirability bias. According to Kline (2015), for each estimated free parameter, at least ten participants are required. Since the questionnaire contained 30 items, a minimum sample size of 300 was required (i.e., 30*10). A total of 800 individuals received the survey, and multiple reminders were sent to minimize non-response bias (Van Mol, 2017). After screening for incomplete responses, 300 valid responses were considered for analysis, meeting the sample size criteria for this study.

Table 1 summarizes the demographic characteristics of the respondents. Out of 300 respondents, 165 were male and 135 were female. Regarding educational qualifications, 160 were bachelor's students, 100 were master's students, and 40 were doctoral scholars. The household income distribution showed that 90 respondents had a monthly household income of up to ₹50,000, 80 had an income between ₹50,001 to ₹1,00,000, 65 had an income between ₹1,00,001 to ₹1,50,000, and the remaining 65 had an income above ₹1,50,001. The study also included respondents from both urban (72.3%) and rural (27.7%) areas. Participants represented various regions of India as well as international students.

Table 1. Sample Characteristics

Variable	Categories	Frequency	Percentage
Gender	Male	165	55.0%
	Female	135	45.0%
Current Education Level	Bachelor's	160	53.3%
	Master's	100	33.3%
	Doctoral Scholar	40	13.4%
Monthly Household Income (₹)	Up to 50,000	90	30.0%
	50,001 - 1,00,000	80	26.7%
	1,00,001 - 1,50,000	65	21.7%
	1,50,001 and above	65	21.7%
Residential Area	Rural	83	27.7%
	Urban	217	72.3%
Region	North	125	41.7%
	South	45	15.0%
	East	40	13.3%
	West	45	15.0%
	Central	30	10.0%
	Foreigner	15	5.0%

3.3 Measures

For this study, measurement scales with proven reliability in past research were used. The attitude towards sustainable behavior was measured using a 5-point Likert scale with six items. Trust in social media influencers was measured using a 7-item, 5-point Likert scale. Engagement with sustainable content was evaluated using a 7-item, 5-point Likert scale. These scales were adapted from previous studies to fit the research context (Table 2).

Table 2. Measures Used and Reference Papers

Measures	Research Paper Used
Consumer Attitudes Towards Sustainable Fashion (CASF)	Lou & Yuan (2019)
Green Purchase Intention (GPI)	Paul et al. (2016)
Subjective Norms (SN)	Ki & Kim (2019)
Perceived behavioural control	Ajzen (1991)
Influencer Credibility (IC)	Lou, C., & Yuan, S. (2019)
Influencer Engagement and Content Strategy (IECS)	De Veirman, M., Cauberghe, V., & Hudders, L. (2017).

3.4 Research Tool

Each tool must be chosen based on the context of the study's setting, taking validity, reliability, and ethics into consideration. The empirical research is the basis that provides the input for developing the model regarding electric vehicle buying intentions. A model for electric vehicle buying intention was developed using both structural and analytical methods. The following instruments have been claimed as resources for this research.

Confirmatory factor analysis (CFA)- It assesses how well out of the measured variables, the few variables capture the number of components. It is used to test whether the measurements of a construct are consistent with the researcher's understanding of the construct (factor) and its nature. Thus, the purpose of confirmatory component analysis is to find out if the data agrees with the assumption of the measurement model.

Structured equation modelling (SEM)- This is the secondary multivariate model of SEM or structural equation modeling and has been adopted as the method of choice in my empirical research (Fornell, 1982). Otherwise, a benefit of this SEM is that it analyzes the explanation of the latent variable in relation to a set of measured variables, enabling SEM to blend with the towards the structural and measurement model, all in one comprehensive and systematic approach.

These tools helped in systematically analyzing the data and ensuring robust results for the study.

Chapter 4: Data Analysis and Interpretation

The analysis relies on SEM. The two-step procedure is how SEM evaluates information. The evaluation process consists of two stages; CFA is applied during the initial assessment of the measurement model followed by structural model validation through SEM. Expert validation of the underlying construct can be obtained from the measurement model which assesses the tool's validity and reliability.

During each step of the process researchers applied the MLE approach following Byrne (2001). Multiple GOF indicators examined the model fit through chi-square (X2) analysis besides chi-square to degree of freedom ratio (X2

/df) and comparative fit index (CFI) alongside Tucker-Lewis index (TLI) and root mean square error of approximation (RMSEA). The research satisfaction model fits well when indices exceed 0.90 and χ^2/df remains between 2 and 5 and when RMSEAs equals or approaches r0.08, according to both Browne and Cudek (1993) and Hair et al. (1998).

The research validated its observations using Structural Equation Modelling (SEM) coupled with Amos for hypothesis evaluation.

In research which aims to develop new theory and prediction SEM proves to be the more suitable method according to Reinartz et al. (2009). The study focuses on making predictions so the researchers decided to use SEM. The research design applied a two-step analytical approach which consisted of inspecting both measurement models and structural models (Anderson and Gerbing, 1988).

4.1 Measurement model

The research contains a potential bias known as common method bias because the information came from single respondents who used an online survey and the same instrument/questionnaire for all variables (Heppener et al., 2008). The assessment instruments for evaluating the model's hypothetical concept consist of validity and reliability. The consistency of scale-generated results is known as reliability. This study utilizes Composite reliability as an assessment to determine the item consistency within construct measures. This instrument attains validity through its capability to generate accurate measurements. Average Variance Extracted (AVE) demonstrates that the scales measuring constructs of the hypothetical model achieve validity. The AVE measurement shows proper results when its convergence and validity score reaches 0.5 or higher.

Maximum likelihood estimation (MLE) became the tool for assessing the measurement model through CFA. The Goodness of Fit statistics presented values of $\chi^2 = 718.922$, df = 390, $\chi^2/df = 1.843$, SRMR = 0.053, CFI = 0.955, RMSEA = 0.053 near the accepted standards. The analysis showed that all measurement items surpassed the recommended threshold of factor loading ($\lambda > 0.5$) and kept statistical significance according to Jöreskog & Sörbom (1993).

Table 1:Model fit measures

Measure	Estimate	Threshold	Interpretation
CMI	718.922	--	--
DF	390.000	--	--
CMIN/DF	1.843	Between 1 and 3	Acceptable
CFI	0.955	>0.90	Good Fit
GFI	0.874	>0.80	Acceptable
NFI	0.909	>0.80	Good Fit
TLI	0.951	>0.90	Good Fit
RMSEA	0.053	<0.08	Good Fit

Our assessment used CFI to determine construct unidimensionality (Kline, 1998 recommends CFI > 0.90) with standardized root mean square residual (RMSEA < 0.08) offered by Hu and Bentler (1998). A single dimension demonstrated in each construct (CFI = 0.955; RMSEA = 0.053). The research used both discriminant validity assessment and convergent validity testing to achieve concept validity (based on Hair et al., 1998). The research used two approaches to establish convergent validity. All factors demonstrated relevant and strong loadings higher than 0.5 according to Bagozzi et al. (1991). Results showed that Average Variance Extracted (AVE) values surpassed 0.5 as per Ruvio and Shogam (2008) and Fornell and Larcker (1981) while composite reliabilities exceeded 0.7 based on Hair et al. (1998). Table 3 indicates strong proof of convergent validity (Table 3). The research uses Fornell and Larcker's (1981) method to establish discriminant validity. The researcher demonstrates construct discrimination by comparing

the square root version of Average Variance Explained (AVE) with the shared variance between constructs. The discriminant validity criterion emerges when the AVE square root exceeds the shared variance value. The establishment of discriminant validity required us to apply Fornell and Larcker's (1981) technique to verify that square relationships between constructs remained below average variance levels. The root AVE results in values beyond squared correlations according to Table 4 which demonstrates construct discriminant validity.

Table 2: Model Validity Measures

	CR	AVE	MSV	MaxR(H)	IC	PBC	CASF	GPI	IECS	SN
IC	0.942	0.766	0.234	0.943	**0.875**					
PBC	0.933	0.736	0.217	0.937	0.377***	**0.858**				
CASF	0.913	0.679	0.227	0.921	0.379***	0.423***	**0.824**			
GPI	0.925	0.711	0.234	0.926	0.483***	0.466***	0.476***	**0.843**		
IECS	0.919	0.695	0.207	0.920	0.388***	0.445***	0.309***	0.456***	**0.834**	
SN	0.919	0.694	0.222	0.921	0.340***	0.448***	0.362***	0.471***	0.451***	**0.833**

Significance of Correlations:

† $p < 0.100$

* $p < 0.050$

** $p < 0.010$

*** $p < 0.001$

The AMOS plugin serves as the tool for these results according to Gaskin, J. & Lim, J. (2016), Master validity tool. Research thresholds originate from "Cutoff criteria for Fit indexes in Covariance structure analysis: Conventional criteria versus New alternatives" as published by Hu & Bentler (1999) in SEM vol. 6(1), pp. 1-55. The evaluation model included factor loadings which satisfied both minimum standards for CR, AVE, MSV and MaxR(H). The assessment of internal consistency through CR values establishes their strength at greater than 0.7 between 0.913 and 0.942. Each construct demonstrates a sufficient level of indicator variance explanation based on its AVE values which exceed 0.5 and range from 0.679 to 0.766. Discriminant validity is confirmed because all MSV values ranging from 0.207 to 0.234 are lower than their corresponding AVE values. The assessment of construct relationships included significance values shown in the provided table. The measurement of discriminant validity is supported by the bolded diagonal values representing the square root of AVE being higher than the row and column correlation values. The model fit analysis showed sufficient results as its indices matched the expected ranges which are similar to CMIN and χ2/df together with CFI, SRMR, and RMSEA in structural model analysis. Evidence from the measurement model evaluation demonstrates that the theoretical constructs achieve good performance and reliability as they match the conceptual framework. No adjustment was necessary for the included items within corresponding constructs based on measurement model analysis results. The research team proceeded with the assessment of the structural model.

4.2 Structural Model

The structural model's analysis was used to test the hypotheses regarding the impact of social media influencers on promoting sustainable behavior among Gen-Z. Based on the regression weights presented in Table 5, all five hypotheses are supported at the $p < 0.05$ significance level.

Table 3. Regression Weights

			Estimate	S.E.	C.R.	P	Label
GPI	<---	IC	.181	.038	4.742	***	
GPI	<---	PCB	.121	.040	3.041	.002	
GPI	<---	CASF	.213	.048	4.397	***	
GPI	<---	IECS	.166	.049	3.352	***	
GPI	<---	SN	.178	.046	3.841	***	
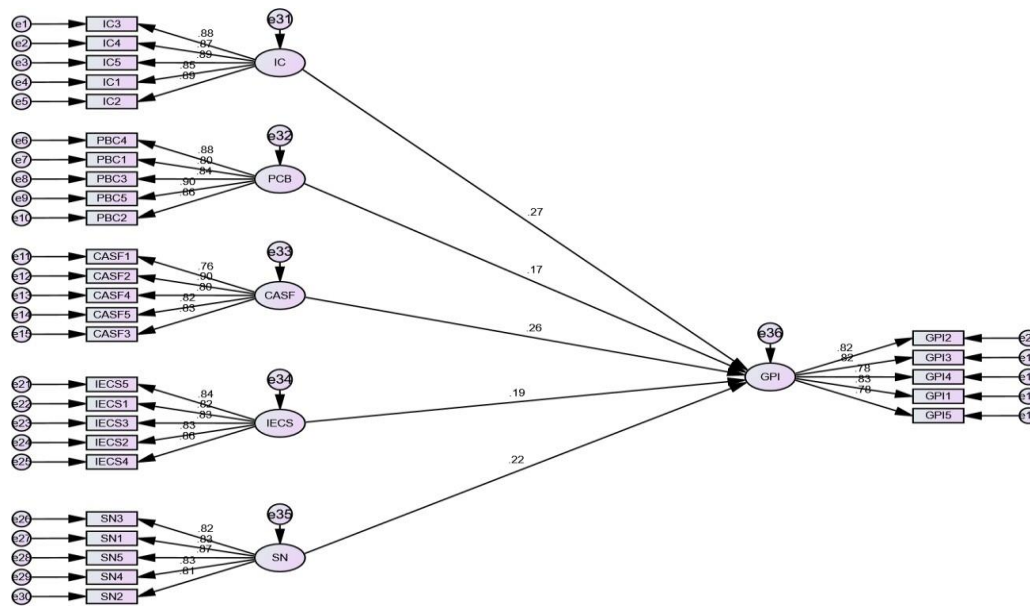
A regression table evaluated the connection between green purchase intention (GPI) and influencer credibility (IC), perceived behavioral control (PBC), consumer attitudes toward sustainable fashion (CASF), influencer engagement and content strategy (IECS) and subjective norms (SN). GPI shows significant dependence on PBC because its p-value reaches 0.002 which falls below 0.05.

People who sense higher control over their sustainable fashion decisions tend to make green purchases. The significance of the variables Improves Green Purchase Intention (GPI) is demonstrated through p-values that fall below 0.001. These variables include TBYB/TB, PBC, IC, CASF, IECS and SN. The results demonstrate that these above-mentioned factors strongly influence the development of green purchase intention among Gen-Z individuals.

• Regression Weights Interpretation: Positive consumer sustainability attitudes (CASF) demonstrate the strongest connection to GPI purchase intentions because their regression weight reaches 0.213. Influencer credibility has a substantial impact on GPI as shown through its weight of 0.181. Social involvement along with peer factors determine GPI to an extent indicated by the regression weight of 0.178. The weight of 0.166 for IECS indicates that combined influencer engagement strategies together with relevant content substantially influence green purchasing decision adoption among consumers. The perceived control factor known as PBC appeared with the lowest weight of 0.121 in

significant relation to GPI. Research results indicate that all examined variables significantly affect green purchase intention because the obtained p-values are less than 0.05. Research has confirmed that Gen-Z sustainable behavior promotion through social media influencers depends on their ability to mold attitude structures as well as influence norms and green decision autonomy.

Discussion

The results of the data analysis provide strong support for the study's hypotheses and confirm the reliability and validity of the measurement model. The Kaiser-Meyer-Olkin (KMO) test yielded a high sampling adequacy value of 0.920, while Bartlett's Test of Sphericity indicated statistical significance ($p < 0.001$), suggesting that the data were suitable for factor analysis. The confirmatory factor analysis (CFA) results also demonstrated a well-fitting model, with acceptable values for various fit indices, including CMIN/DF (1.843), CFI (0.955), GFI (0.874), and RMSEA (0.053), all meeting recommended thresholds. These findings confirm that the model effectively captures the relationships among the variables examined.

The study assessed construct validity using both convergent and discriminant validity tests. Convergent validity was supported by factor loadings exceeding 0.5 and Average Variance Extracted (AVE) values above 0.5, indicating that the items reliably measured their intended constructs. Composite reliability (CR) values ranged from 0.913 to 0.942, reinforcing the internal consistency of the measurement items. Furthermore, discriminant validity was established as all Maximum Shared Variance (MSV) values were lower than their respective AVE values, demonstrating that constructs were distinct from one another. These findings indicate that the measurement model is robust, ensuring the credibility of subsequent structural model analysis.

The structural model was employed to examine the impact of social media influencers on promoting sustainable behavior among Gen-Z consumers. The regression analysis confirmed that all five hypotheses were supported at a significance level of $p < 0.05$. Green purchase intention (GPI) was positively influenced by influencer credibility (IC), perceived behavioral control (PBC), consumer attitudes toward sustainable fashion (CASF), influencer engagement and content strategy (IECS), and subjective norms (SN). Among these, CASF had the highest impact ($\beta = 0.213$), followed by IC ($\beta = 0.181$) and SN ($\beta = 0.178$). These findings highlight the critical role of influencers in shaping consumer behavior and driving sustainable purchasing decisions.

Notably, perceived behavioral control (PBC) also exhibited a significant effect on GPI ($p = 0.002$), suggesting that individuals who feel a higher sense of control over their sustainable fashion choices are more likely to engage in green purchases. This aligns with prior research emphasizing the importance of perceived self-efficacy in sustainable consumer behavior. The significance of all examined variables underscores the multidimensional nature of green purchase intention, reinforcing the need for strategic influencer marketing efforts to encourage sustainable consumption patterns among young consumers.

Overall, the study's findings contribute valuable insights into the role of social media influencers in promoting sustainability. The strong model fit and statistically significant relationships provide empirical support for the theoretical framework, validating the proposed constructs and their interconnections. Future research could explore additional moderating factors, such as cultural influences or economic constraints, to further refine the understanding of consumer decision-making in the context of sustainable fashion.

Recommendations

- **Expand Research Variables** – Future studies should incorporate additional influencing factors such as **brand trust, perceived product effectiveness, and marketing strategies** to better understand sustainable clothing purchasing behavior.
- **Improve Product Accessibility and Affordability** – Companies should work on making sustainable clothing more **affordable and accessible** while ensuring high product quality to encourage wider adoption.
- **Enhance Awareness and Marketing Strategies** – Sustainability campaigns should focus on **educating consumers** about the environmental benefits of eco-friendly clothing, emphasizing both ethical production and product longevity.
- **Strengthen Survey Reliability** – Future research should refine the measurement scales to improve **data consistency and reliability**, ensuring more accurate and meaningful insights.
- **Conduct Qualitative Research** – To gain deeper insights, future studies should consider **interviews or focus groups** to explore the underlying motivations and barriers to purchasing sustainable clothing.

By implementing these recommendations, businesses and researchers can better understand and influence consumer behavior toward sustainable fashion choices.

Future Scope

This study provides a strong foundation for understanding the influence of social media influencers on sustainable consumer behavior; however, there are several avenues for future research. One potential direction is the exploration of cultural and regional differences in the impact of influencer marketing on sustainable purchasing decisions. Since consumer attitudes and behaviors vary across demographics and cultural backgrounds, comparative studies could offer deeper insights into the effectiveness of influencer campaigns in different markets.

Additionally, future research can examine the long-term effects of influencer-driven sustainability messages. While this study focuses on immediate behavioral intentions, understanding how these messages shape long-term consumer habits and brand loyalty would be valuable. Longitudinal studies could assess whether repeated exposure to sustainability-focused content leads to lasting behavioral changes.

Another promising area for future exploration is the role of emerging technologies, such as artificial intelligence (AI) and augmented reality (AR), in enhancing influencer marketing strategies for sustainability. AI-powered influencers and immersive AR experiences could create more personalized and engaging content, potentially increasing consumer involvement in sustainable practices. Investigating how these technological advancements influence consumer trust and decision-making could provide valuable insights.

Moreover, the economic and psychological factors affecting sustainable consumption warrant further investigation. Research could examine how financial incentives, government policies, or psychological nudges influence consumer willingness to adopt eco-friendly products. Understanding these factors could help businesses and policymakers design more effective interventions to promote sustainable choices.

Finally, future studies could explore the ethical implications of influencer marketing in sustainability. As influencers play a crucial role in shaping consumer perceptions, it is essential to analyze the authenticity and transparency of their endorsements. Examining how consumers perceive greenwashing or misleading sustainability claims could provide guidelines for ethical influencer marketing practices.

By addressing these areas, future research can enhance the understanding of influencer-driven sustainability efforts, paving the way for more effective marketing strategies and policy interventions that drive meaningful environmental and social change.

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