IRJMS

Millets and Gen Z: Exploring the Impact of Influencer Marketing on Purchase Decision towards Millets

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Abstract

The growing popularity of the influencer role in shaping consumer behaviour is significant among the younger generation, particularly Gen Z, a prime target for influencer-driven campaigns. This study aims to examine the influencer characteristics like credibility, content relevance, and customer engagement activities towards Gen Z purchase decisions mediated through purchase intention toward millets, which are gaining popularity due to their health and nutritional benefits. Drawing on the Theory of Planned Behaviour, this research studies the underlying factors that influence Gen Z individuals' approaches, personal norms, and perceived behavioural control, as well as Gen Z's buying intention towards the decision to purchase millet-based products. Based on the results from the proposed hypotheses, the research demonstrates that influencer characteristic credibility has a substantial influence on purchase intention and plays a key role as a mediator, which in turn impacts the purchase decision. Additionally, content relevance and consumer engagement demonstrate a positive association with purchase intention, though this effect is not statistically significant. This study aims to understand how influencer credibility influences purchase decisions and suggests that marketers identify reliable influencers to maximize purchasing actions. Further, the study provided valuable insights for marketers on leveraging influencer strategies to promote millet products among Gen Z.

Keywords: Consumer Engagement, Gen Z, Influencer Marketing, Millet, Purchase Decisions.

Introduction

Millets, a conventional grain used for generations and an indispensable part of India's long-standing agricultural practices and dietary heritage. Millets are known for their dexterity to confront the effects of climate change and are a vital source of inherent nutrients that support better digestion, drought resistance, promote overall wellness, and are environmentally sustainable, Millets are the powerhouse of protein, vitamins, and minerals, leading to highly nutritious overall health benefits, and consuming them regularly helps in losing weight, managing blood sugar levels, improving immunity, lowering the risk of heart disease, improving digestion, and providing powerful antioxidant benefits (1). The Green Revolution in the 1960s has made tremendous changes in the area given to millets for agricultural decreased, the production appears to be high-yielding varieties of millets and advanced technologies (2). Millet variants help individual health benefits, including that sorghum is high in protein, iron, and gluten-free; finger millet contains high levels of calcium and iron improves bone health; "Pearl millet" is high in magnesium helps to reduce respiratory issues; "Foxtail Millet" is recognised as a dietary fibre and has shown potential benefits as an antioxidant; "Kodo Millet" has protein content, which impact on metabolic well-being; "Barnyard Millet" is rich phosphorus and iron, which improves its overall nutritional value; these include little millet and Brown top millet, which have a less glycaemic index, making them suitable for individuals with diabetes. The most popular types of millet, Jowar, Bajra, and Ragi, account for 90% of total millet production, with Bajra alone making up about 60%. Although India is a leading producer of millets, its exports represented only 1% of the total in 2021-22, indicating significant untapped opportunities in both export markets and value-added products, per capita consumption has declined sharply from 30.94 kg in 1960 to just 3.87 kg in 2022 due to stagnating production and a

rising population. Currently, a significant portion of consumption is allocated for human food, animal feed, and industrial use. According to ASSOCHAM (2022), about 75% of sorghum and ragi and 69% of pearl millet are directly consumed, while a small share is processed into value-added products. Millets are used for animal feed (12–15%) and for industrial purposes, such as liquor production and ethanol blending. Over 500 startups promote millet-based products, aided by growing health awareness. Bengaluru leads urban millet consumption, followed by Chennai and Hyderabad, with health benefits cited as the primary motivator. NSSO data shows Assam and Bihar have the highest small millet consumption in rural households (3). "Millets" have notable environ-mental benefits, which require a smaller amount of water compared to crops such as rice, wheat, and are naturally gluten-free and have a low glycaemic index, providing a high concentration of essential amino acids, which makes them an ideal component for a healthy diet (4). However, despite these health and environmental benefits, millet faces challenges in widespread consumer adoption, a lack of specialised knowledge about its nutritional composition, health advantages, and culinary uses. Marketing influencers' characteristics outline the consumer attitudes and improve purchase decisions with their credibility, authentic content, and product endorsements among Gen Z, and Influencers' comprehensive awareness campaigns focus on the nutritional values of millets, strengthen the consumer's knowledge from cultivation to recipes, and provide suggestions on daily diets (5).

People's knowledge and consumption of millet are significantly correlated, and they are more willing to consume millets when they are aware of their nutritional value, health benefits, and culinary heritage; cultural preferences play an important role because millets are a traditional food in some communities. However, a lack of awareness leads to consistent dependence on conventional grains like rice and wheat, which reduces the consumption of dietary foods and better nutrition. Demographic factors like age, occupation, family income, and educational qualification have a big influence on millet consumption patterns, and people will try new foods (6).

Influencer marketing is a promotional tool for marketers to communicate about products to their target audience, especially Generation Z, who are associated with digital technology, high engagement with social media, and specific consumption habits, resulting in a significant transformation of the marketing landscape through social media platforms and digital content. Generation Z is digitally native and heavily uses digital platforms; influencers can have a big impact on consumer behaviour by using their perceived expertise and authenticity, which fosters engagement and builds trust in reaching younger audiences (7). When making purchases, members of Generation Z give top priority to sustainability, authenticity, and health. Academics and marketers need to comprehend the precise processes by which influencer marketing affects Gen Z's attitudes and actions regarding new food products, such as millet-based options.

The National Food Security Mission, which improves production through better practices, high-quality seeds, and technology transfer, and the Initiative for Nutritional Security, which increases consumer access and awareness of millet's nutritional value, are two examples of the Indian government's efforts to increase production and consumption of millet (8). The State Government has initiated the Millet Mission to encourage local production, focusing more on research in millets and increasing consumption. The Odisha Millets Mission created awareness of the nutritional advantages of millet, helping small farmers in agricultural processing and new marketing initiatives (9).

Millets are ancient grains, sustainable, nutrient-dense, and healthy qualities, and are becoming more and more popular. Gen Z's purchasing decisions are greatly impacted by influencer marketing promotional campaigns on various platforms, and exerting consumer behaviour includes consumer engagement, authentic content, and credibility. Purchase intention acts as a mediating variable that affects a customer's actual purchasing decision. Millets are climate resilient and eco-friendly to support sustainable farming methods like soil conservation, water management, and natural pest and disease control with innovative approaches like intercropping and chemical-free millet cultivation, which will ultimately improve global food security and promote sustainability (10). The research provides inputs to policymakers, researchers, and farmers

with the necessary information. The use of advanced technology in agricultural processing has improved the millet quality and its variants through the process of milling, extrusion, and fermentation techniques that have enhanced the grain's flavour and digestion ability. Influencers who share authentic content about product experiences can increase their credibility and trustworthiness with Gen Z customers. Using influencers who are enthusiastic about sustainable eating, nutrition, and health benefits can help to develop a more relatable and natural story about millet-based products. Promotional messages created by micro influencers for Gen Z demographics are facilitated by working towards communities that are deeply rooted in society (11). The UN has declared the "2023 International Year of Millets", and plays an important role in sustainable development, and its benefits are like economic value, environmental impact, and nutrition (12). According to the "Sustainable Development Goals of the UN", the value of millet production can resolve many important issues, including lowering poverty rates, eradicating hunger, enhancing health outcomes, encouraging eco-friendly behaviour, and fostering a long-term sustainable future. Because of millet's health advantages and eco-friendly qualities, which promote ecosystem diversity, fewer chemicals are used, which is in line with Gen Z's green values.

Gen Z's are those who were born from 1996 to 2010, their digital education has developed unique characteristics, consumer attitudes, and spending patterns has set them separately from previous generations, Generation Z population is up to 27 percent of the total world's population, with major share in countries like developing nations including China and India, by 2020, it is predicted that they will account for about 40 percent of all consumers across worldwide (13). Generation Z is concerned about sustainable consumption, environmental protection, and learning how consumers choose eco-friendly products; the findings showed that price and availability are less effective, perceived quality, consumer awareness, perceived value, and trust in ecological products significantly influence the purchase intention (14). The health benefits of consuming organic food impact on the environment, and the perceived superior quality of organic products significantly influences Gen Z's intention to purchase organic

products. According to the study, social media influencers and price sensitivity are important elements when making purchase decisions. The study concludes that Gen Z consumers' purchase intentions are not significantly impacted by demographic factors; Gen Z's consumption decisions are heavily influenced by digital engagement, peer reviews, social media trends, and influencer endorsements, despite the dietary and ecological benefits of millets (15).

The influencers who appeared as ordinary individuals were more convincing than those who classified themselves as micro-celebrities (16). This was attributed to the perception that laypeople were more credible and socially appealing, which had a favourable effect on consumer attitudes toward the brands being advertised. Influencer marketing leverages celebrities, experts, and famous personalities to endorse products and services, reaching and engaging potential consumers and shaping their attitudes to make them trust influencers' content from individuals, and researchers also found that influencer types include "mega, macro, micro, and nano" influencers, each categorised based on their followers and expertise (17). Various types of social media platforms like YouTube, Instagram, Facebook, and LinkedIn offer unique prospects to interact with their audiences, with Instagram being particularly popular due to its short video content distribution capabilities, and researcher finds and examine that trustworthiness, expertise, and attractiveness directly influence the consumer's purchase intention (18). Influencer marketing campaigns help in identifying niche markets and target specific demographics efficiently for the brands through more personalised and targeted advertising campaigns in reaching younger demographics who are active on social media platforms and rely on product recommendations and reviews posted by influencers. Purchase intention can be influenced by Influencer marketing and its impact on millet-based product purchase intentions due to factors such as credibility, trustworthiness, and product alignment. Partnering with credible, health-focused influencers who authentically promote these products can increase their appeal (19). The effectiveness of influencers is measured through consumer engagement rates, consumer click rates, adaptation rates, and overall brand attachment

among the target audience. The impact of social media influencers' consumer engagement activities is important in buying decisions by fostering trust, building emotional connections, and providing feedback (20). Influencer types are crucial for promotional campaigns, helping companies to select the right influencers effectively, which leads to developing the consumer purchase intention and impacts the effectiveness of marketing strategies. Influencer marketing increases customer engagement, brand recognition, and purchase intent by allowing product promotion to engage with consumers more effectively. The product awareness created by influencers will be quicker than traditional digital advertising, and the results show that influencers significant impact on brand promotion, and little effect on actual purchasing decisions (21).

The influencer's expertise, reliability, and attractiveness are components of influencer credibility, and they play a vital role in influencing consumer behaviour, especially purchase intention. According to studies, genuine content from influencers can improve Gen Z consumers' trust and influence their purchasing decisions (22). The distinct facets of social media influencer credibility impact different aspects of consumer behaviour. Influencer expertise shows in-depth knowledge of millet-based products and can successfully influence consumer intention, resulting in recommendations and product endorsements. Consumer trust is one of the primary components of influencer credibility. Second, for Influencers to remain credible, authenticity is crucial. To remain credible, influencers need to build and preserve a reputation free of scandals. Finally, influencer credibility that affects how customers perceive them is their attractiveness and authentic content that develops consumer intent to buy millets by offering useful information, and customers are more inclined to believe influencers who come across as sincere and open. Authenticity dramatically increases consumer trust and purchase intentions, according to studies (23).

Influencer content is most relevant in engaging customers when influencers endorse goods that align with their brands and the audience's interests, which leads to purchase intentions (24). According to the research, Generation Z's purchase intentions are effectively impacted by the credibility factors perceived by consumers, perceived expertise, and their reliability (25). The research emphasises the significance of credibility, involvement, and perceived worth in influencing the buying behaviours of Generation Z within live-streaming e-commerce, enhances the purchase intention element is crucial for marketers to enhance their strategies and effectively reach their target audiences. Engaging consumers effectively by using interactive elements like polls, quizzes, and Q and A sessions can significantly enhance consumer interest in millet-based products (26). Customers often recall a brand when they interact with interactive content, and customer interaction may result in a better comprehension of the advantages of the product, which may ultimately affect decisions to buy. Strengthening purchase intention requires promoting customer feedback. When marketers actively seek opinions and suggestions from their customers, it influences future purchasing behaviour. Utilising interactive content and encouraging consumer feedback are powerful strategies for enhancing interest in millet-based products and fostering purchase decisions.

Consumer buying intention refers to the circumstances under which customers are more likely to purchase a product, and is typically correlated with consumer behaviour, attitudes, and perceptions is an important way that customers access and assess certain products through their purchasing activity (27). Purchase intention refers to a consumer's potential, plan, and willingness to buy a good or service in the future. Purchase intention is a factor that includes both the number of units of products purchased within a given time frame and the consumer's plan to acquire a particular product (28). Effective techniques entail demonstrating the product's benefits and utilising the influencer's audience participation to develop trust and drive purchases. Key Factors Influencing Purchase Intention. Influencers perceived as trustworthy and knowledgeable, especially in health and nutrition, significantly impact purchase decisions. According to studies, an influencer's credibility is increased by their competence and dependability, which strengthens the persuasiveness of their recommendations. By sharing recipes, anecdotes, or the benefits of millet products, influencers can

improve their relationship with their audience and encourage more purchases. Real, entertaining, and educational content is more likely to be accepted by audiences.

Influencer marketing significantly affects consumer choices across a range of product categories, including millet and other food items. Influencer power to change consumer trust and brand perceptions crucial element in consumer purchase decision-making. Influencer marketing has the power to improve brand perception, which in turn influences favourable consumer choices, as demonstrated in the cosmetics industry, where influencer endorsements have increased consumer confidence and sales (29). Studies have shown influencer marketing has improved brand perception, resulting in increased consumer interest and purchase decisions. Influencers who highlight the environmental and health benefits of millet products can improve brand recognition. Millet's nutritional and health advantages are a perfect product for influencers, particularly when influencers highlight essential features to attract health-conscious customers.

Influencer marketing constructs, such as credibility, trust, genuineness, and purchase intention, are conceptually and empirically distinct and represent sequential components. Influencer credibility functions as an expertise and reliability trait of an influencer, trust reflects a social evaluation, genuineness acts as authentic content, and purchase intention represents the behavioural outcome (30). This framework is theoretically built in the literature and modelled as latent variables.

In this study, Consumer Engagement is conceptualised as value-based evaluative engagement rather than as behavioural interaction, reflecting consumers cognitively and affectively engage with influencers promoted products through their perceived value attributes (31). This conceptualisation aligns with previous studies that viewed engagement as a state of involvement and evaluation rather than solely observable online behaviours (32). The selected dimensions, cost or affordability, environmental friendliness, quality, health benefits, and taste represent salient value cues through which consumers engage with food-related influencer content. Cost and affordability reflect economic involvement and perceived value-for-money

consideration. Health benefits and quality nutrition indicate cognitive engagement with functional and well-being aspects of the product. Millet taste signifies the emotional engagement related to sensual expectations. Millet is an environmentally friendly product regarded as ethical and value-based engagement, which acts as a personal belief and sustainability to the consumers. This framework is more appropriate within food and health-conscious factors for influencer marketing. Hence, consumer engagement is reflected as personal relevance to evaluate the millet-based products over online interactions such as likes or comments (33).

The Theory of Planned Behaviour (TBP) comprises three variables includes attitudes toward the behaviour, subjective norms, and perceived behavioural control that shape behavioural intention (34). TBP has been applied in several disciplines, such as consumer behaviour, organisational behaviour, environmental studies, and health psychology. The consumers' favourable attitude toward millet consumption is an indication of their opinions about millet flavour, health advantages, and the environmental sustainability of products made from millet. In influencer marketing, this theory is further applied to incorporate influencers' traits such as credibility, which include expertise, trustworthiness, and attractiveness, as well as authenticity and content relevance, and value-based engagement. These constructs influence behavioural intentions that lead to purchasing decisions (35). Specifically, attitudes are influenced by influencer credibility and expert knowledge, combined with authentic content and appeal, which can positively influence and develops behavioural intentions (36). Further, if influencers are distinguished as experts and reliable, consumers are expected to evaluate the product communication and behavioural intention. Subjective norms are shaped by relational factors such as influencer and follower interactions that is how influencers engage the followers (37). Influencers actively engage in various activities like quizzes, posts, and information create perceived social pressure that encourages followers to conform to recommended behaviours. Perceived behavioural control is influenced by both influencer authentic content and the communication platform (38). Calls to

action, demonstrations of product use, and accessible purchasing links enhance confidence in their ability to influence the purchase behaviour, thereby strengthening positive attitudes toward purchase decisions (39). Overall, this study conceptualises that influencer credibility, expertise, and attractiveness are proposed to influence consumer attitudes, while consumer engagement activities are expected to shape subjective norms. Influencer authentic content is positioned to enhance perceived behavioural control and behavioural intention, which subsequently leads to actual consumer behaviour within influencer marketing contexts.

The present research aims to achieve the principal objectives of investigating the impact of influencer marketing characteristics on consumer behavioural intentions and actual buying decisions. Additionally, this study examines the purchasing decisions of Gen Z consumers regarding millet-based products.

Methodology

The researcher used a sampling approach to gather data from the identified target population to determine that an appropriate sample size requires careful consideration of several key factors, including the total population, the desired confidence level, and the acceptable margin of error (40). Considering the factors, the researcher calculated a minimum sample size to ensure the findings can be generalised to the large population size.

Population Size (100,000)
Confidence Level (95%)
Margin of Error (3%)
Calculation of Sample Size: The formula commonly used for calculating sample size for large populations (Equation [1]).

$$n = \left[\frac{Z^2 \times p \times (1-p)}{E^2} \right] \qquad [1]$$

Where:
n = Sample size
Z = Z-score corresponding to the desired confidence level (1.96 for 95% confidence)
p = Estimated proportion of the population (usually 0.5 if unknown)
E = Margin of error (expressed as a decimal, i.e., 0.03 for 3%)

The researcher considered a confidence level of 95%, a margin of error 3% with an estimated individual population of 100000. The sample size of 200 respondents is adequate, based on the calculation to support a reliable statistical analysis for the study.

The study meets the analytical requirements of 212 respondents. Particularly, the number of constructs and structural paths in this model ensures that reliable and sufficient estimation is relatively acceptable in terms of minimum sample size, based on statistical power considerations and commonly accepted guidelines (41).
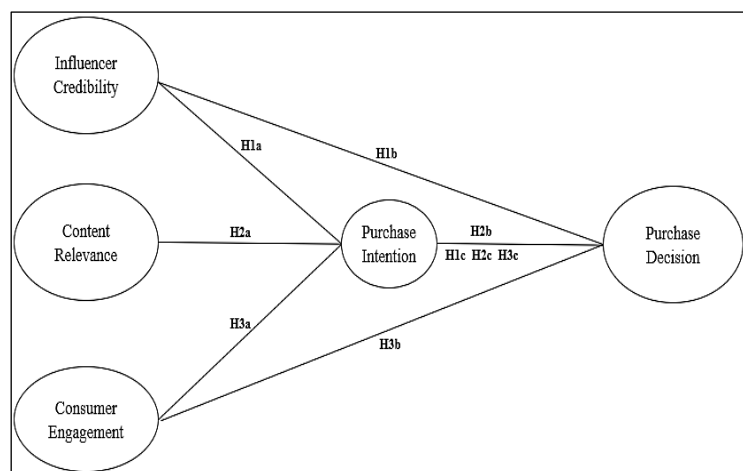

Figure 1: Theoretical Model and Hypotheses Leading to Purchase Decisions

In this research, Figure 1 proposes that conceptual model constructs are established and validated scales adapted from prior studies, specifically, influencer credibility is operationalised through expertise, trustworthiness, and attractiveness, adapted from (42). Content relevancy is measured using items adapted from previous studies examining perceived relevance and informativeness of online content (43). Consumer engagement is operationalised using cognitive, emotional, and behavioural engagement dimensions (44). The following proposed model was created from the literature review (34).

H1-Significant effect of Credibility on Purchase Intention and Purchase Decision.

H1a-The Impact of influencer credibility on purchase intention.

H1b-Significant impact of influencer credibility on Consumer purchase decisions.

H1c-There is a significant relationship between influencer credibility and purchase decision is mediated by consumer purchase intention.

H2-Effect of Influencer Content Relevance on Purchase Intention and Decision

H2a-The Positive impact of influencer content on consumer purchase intention.

H2b-Consumer buying decisions are impacted by influencer content relevancy.

H2c-There is a significant relationship between consumer purchase intentions mediated by influencer content relevance and purchase decision?

H3-Impact of Influencer Consumer Engagement on Purchase Intention and Purchase Decision

H3a-Influencer consumer engagement has a positive impact on consumer purchase intention.

H3b-Influencer consumer engagement has a positive impact on consumer purchase decisions.

H3c-Consumer purchase intention mediates the relationship between influencer consumer engagement and purchase decision.

Results

The reliability of the constructs was assessed using Cronbach's Alpha (α), a measure of internal consistency is 0.7 or higher is acceptable.

Table 1 shows that Influencer Credibility (IC) is 0.894, which indicates the construct is strongly reliable. Consumer Engagement 0.866 is excellent reliability, suggesting that the construct is well-defined and that the items strongly align with the underlying concept of consumer engagement. The Content Relevance (CR) 0.735 score is reliable, indicating strong internal consistency among the items measuring content relevance.

Table 1: Cronbach's Alpha Reliability

Variable	Cronbach's Alpha	Level of Reliability
Influencer Credibility (IC)	0.894	Very Reliable
Consumer Engagement (CE)	0.866	Very Reliable
Content Relevance (CR)	0.735	Reliable

The data was also checked for multicollinearity based on the results; the "Variance Inflation Factor (VIF)" value is less than 5, which implies that the independent variables are not highly correlated.

The Component Matrix is a data reduction technique and shows the correlations (loadings) between each observed variable and the principal components (or factors) extracted during Principal Component Analysis (PCA). A high loading value close to 1 represents a strong relationship between the variable and element, and a low loading value close to 0 represents a weak relationship. Table 2 revealed that PCA extracted three variables; consumer engagement, influencer credibility, and content relevance are strong loading factors for the scales.

Figure 2 describes the Scree plots, which illustrate that the variances of the eigenvalues associated with each principal component help to decide the factors.

Analysis of Figure 2 shows that Principal Components 1-3 exhibit the greatest variation compared to the other 16 principal components. The principal components with more than one eigenvalue showed greater variation among the factors.

Table 3 assesses the size and direction of the linear relationship between variables, which indicates, each variable is independent of the other, and there is no linear correlation between CE, IC, and CR.

Table 2: Results of Principal Component Analysis

Measures	Component Matrix*	Components (CE)	(IC)	(CR)
CR	How often do you follow food-related influencers on social media? [CR]			0.689
	How likely are you to try products recommended by influencers you follow? [CR]			0.697
	How often do you follow influencers who promote food products? [Q12_IC]		0.793	
IC	How often do you engage with influencer content related to Millet-based products? [Q12_IC_A]		0.851	
	How often have you considered purchasing a Millet product based on an influencer's recommendation? [Q12_IC_B]		0.862	
	How often do you consume millet-based products based on an influencer's recommendation? [Q12_IC_C]		0.848	
	How credible do you find influencers regarding food product recommendations? [Q12_IC_D]		0.828	
	Affordable (Cost Efficiency) [Q13_CE_L]	0.806		
	Health benefits [Q13_CE_A]	0.814		
	Product Attribute [Q13_CE_B]	0.428		
	Nutritious [Q13_CE_C]	0.802		
	Suitable for all the members [Q13_CE_D]	0.806		
CE	Convenient (Availability) [Q13_CE_E]	0.835		
	Quality [Q13_CE_F]	0.837		
	Environment friendly [Q13_CE_G]	0.818		
	Recommended by others [Q13_CE_H]	0.787		
	Reliability of the Millets [Q13_CE_I]	0.809		
	Taste [Q13_CE_J]	0.832		
	Knowledge on Millet products [Q13_CE_K]	0.791		

Note: 1. CR = Content relevance, IC = Influencer Credibility, CE = Consumer Engagement.

2. All standardised factors (components) whose eigenvalues greater than one are retained.
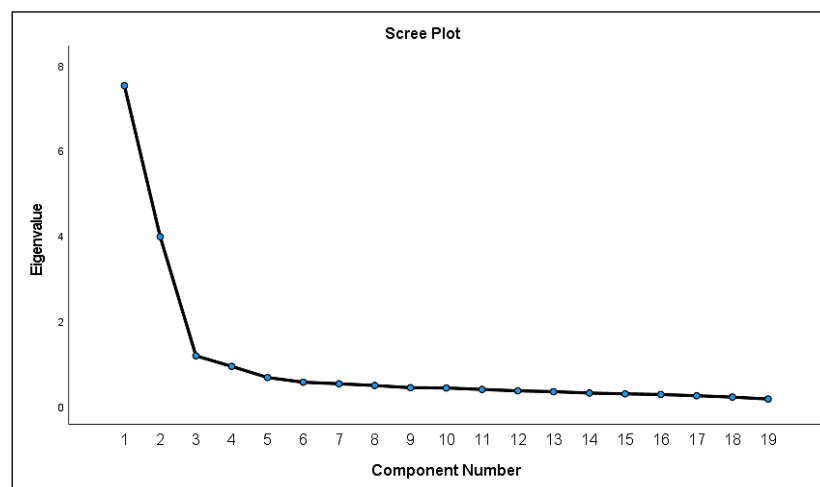
Figure 2: Scree Plot of the Principal Component Analysis

. **Table 3:** Results of the Pearson Correlation between the Variables

| Measures	CR → PI	IC → PI	IC→ PD	CE → PI	CE → PD	PI → PD
CR → PI	1					
IC → PI	-0.245	1				
IC → PD	-0.001	-0.061	1			
CE → PI	-0.115	0.041	-0.013	1		
CE → PD	-0.011	0.002	-0.042	-0.089	1	
PI → PD	-0.040	-0.180	-0.385	0.083	0.128	1

Table 4: Results of the Model Fitness Test

Description	Values
Chi Square	2172.812
DF	696
Prob. > Chi-Square	2.36e-151
CFI	0.7613386
RMSEA	0.1000438

Table 4 shows that the accuracy of the model was assessed using goodness-of-fit criteria. If the assumption is satisfied, we can proceed to test the model. Furthermore, the RMSEA value is 0.1, which means that this model can be said to be good. Then the CFI value is more than 0.7, which means that this research model can be a good model.

The estimated path coefficients diagram presented in Figure 3 shows the relationship among the exogenous variables such asCR, IC, and CE, which were examined with the endogenous variables PI and PD, using Structural Equation Modelling. The arrows from CR, IC, and CE to PI indicate the influence of behavioural intention, and similarly, from IC, CE and CR to PD have a direct impact on buying decisions. In addition, PI to PD highlights the mediating role in purchase behaviour. The values shown along with the arrows show the standardised path coefficients, which denote variance (R^2), the strength and direction of endogenous variables.
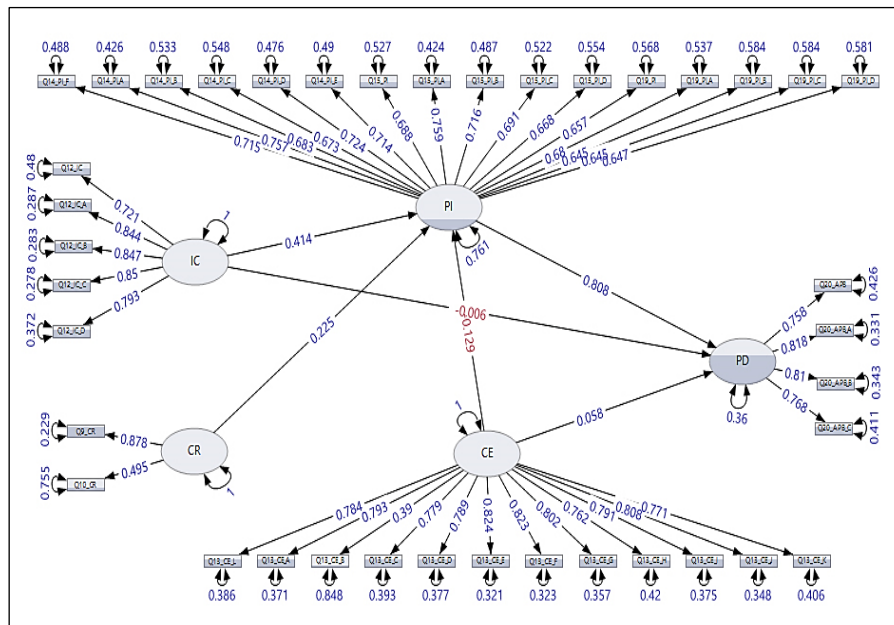
Figure 3: Path Diagram of the Interconnected Variables and Indication of Causal Flow

Table 5: Model-Implied Correlation

Measure	CR	IC	CE	PI	PD
CR	1				
IC	0	1			
CE	0	0	1		
PI	0.2254	0.4136	-0.129	1	
PD	0.1821	0.3283	-0.0458	0.7978	1

Table 5 exhibits the correlation matrix among constructs indicate that Purchase Intention (PI) has a positive correlation with Content Relevance (CR) (r = 0.2254) and Influencer Credibility (IC) (r = 0.4136), while it shows a weak negative relationship with Consumer Engagement (CE) (r = −0.129). Further, Purchase Decision (PD) is positively correlated with CR (r = 0.1821), IC (r = 0.3283), and PI (r = 0.7978), resulting in a strong association between PI and PD. CE shows negative correlations with both PI (r = −0.129) and PD (r = −0.0458).

Table 6: Results of Regression Analysis

Regressions	Estimate	Prob>|Z|	Conclusion
CE → PD	0.0608049	0.2763	Not significant; CE does not significantly influence PD directly
CE → PI	-0.136404	0.0558	Marginal negative effect on PI; barely insignificant
CR → PI	0.2431112	0.1002	Positive but not statistically significant impact on PI
IC → PD	-0.005861	0.9289	Not significant; IC does not directly affect PD in the regression table
IC → PI	0.4277209	<.0001*	Strong, significant positive influence on PI
PI → PD	0.7946197	<.0001*	Strong, significant positive effect the actual Purchase Decision

Table 6, shows that IC has a significant effect on PI, which in turn affects PD. PI drives PD, serving as a powerful mediator. CE has a limited negative influence on PI, however, it has no significant impact on PD. CR positively impacts PI, although the effect is not statistically significant. The relationship between IC and PD is inconsistent across models; while regression suggests no significance, other tables reveal a strong total effect, implying mediation is key.

Table 7: Mediation Analysis of Purchase Intention (PI)

Predictor	Outcome	Direct Effect	Std. Error	P value	Std. Estimate	Interpretation
CR → PI	PI	0.2431	0.1479	0.1002	0.2254	Not significant at the 0.05 level, but a positive influence
IC → PI	PI	0.4277	0.0837	<.0001*	0.4136	Strong and significant positive influence
CE → PI	PI	-0.136	0.0713	0.0558	-0.129	Marginally significant negative effect
PI → PD	PD	0.7946	0.095	<.0001*	0.8077	Strong and significant positive effect

From Table 7, the mediation analysis examines the impact of Customer Engagement (CE), Content Relevance (CR), and Influencer Credibility (IC) on Purchase Intention (PI) and explores whether PI mediates their influence on Purchase Decision (PD). Purchase Intention (PI) significantly mediates the relationship between Influencer Credibility (IC) and Purchase Decision (PD). While Content Relevance (CR) and Customer Engagement (CE) have some impact on PI, only IC demonstrates a strong and statistically significant effect.

From Table 3, the correlation analysis represents straightforward, pairwise relationships and does not influence the impact of additional factors within the model. From Table 6, on the other hand, regression and SEM analysis estimate partial effects, because the effect of the independent variable is evaluated while controlling for the other predictors. As a result, a weak or negative relationship at the bivariate analysis may become a positive and significant relationship when the additional variables are factored (45, 46).

Table 8: Extracts Hypothesis Results

Hypothesis	Statement	Decision	Rationale
H1a	IC has a positive impact on PI	Supported	Significant positive effect (p < 0.001)
H1b	IC has a positive impact on PD	Supported	Though the direct path in regression is not significant, the total effect via mediation is strong
H1c	PI mediates the relationship between IC and PD	Supported	Strong indirect effect (IC → PI → PD) proven through mediation
H2a	CR has a positive impact on PI	Not Supported	Positive influence, but not statistically significant (p = 0.1002)
H2b	CR has a positive impact on PD	Not Supported	The direct effect is not significant, but the total effect suggests a substantial mediated contribution
H2c	PI mediates the relationship between CR and PD	Supported	The indirect path via PI is substantial, despite a weak direct effect
H3a	CE has a positive impact on PI	Not Supported	Negative and marginally significant (p = 0.0558)
H3b	CE has a positive impact on PD	Not Supported	Not significant (p = 0.526) and even slightly negative
H3c	PI mediates the relationship between CE and PD	Not Supported	The mediated effect is weak and negative

Table 8 presents that the examination of the exogenous variable has a positive impact on the endogenous variables, andan analysis was carried out to test the hypothesis. In this stage, the researcher evaluated the path coefficients to indicate the strength of the relationship and statistical significance. Further, measuring the significance of estimated parameters to check the nature and direction of the relationship among the variables, the proposed hypotheses were either supported or not supported.

Discussion

From Table 8, the research examined the relationships among influencer credibility (IC), content relevance (CR), and customer-based value engagement (CE), with a particular focus on purchase intention (PI), as a mediating role in purchase decisions (PD) among Gen Z towards millet-based products. The study offers important theoretical and managerial implications.

The results support the impact of influencer credibility in shaping Gen Z behavioural intention (22, 23). Hypothesis H1a shows that IC has a significant and positive effect on purchase intention among Gen Z towards millet products when they perceive influencers as expert knowledge and trustworthy. Hypothesis H1b tests that the effect of IC on purchase decisions is not statistically significant; however, through mediation, there is a substantial effect. Further, H1c states the mediation of purchase intention in the IC to PD relationship. The result highlights that IC may not directly influence PD but rather mediates through behavioural intention and later leads to actual buying decisions.

Content relevance (CR) does not show a significant direct effect on behavioural intention (H2a) or purchase decisions (H2b). However, CR has a positive relationship with PI, the effect was not statistically significant. This research highlights that content may not be sufficient to influence the purchase decisions when buying millet-based products. However, Hypothesis H2c is supported; PI mediates the relationship between CR and PD (24). This shows CR indirectly to PD, even though the effect is weak, but it strengthens when it is combined with credible influencers (25).

Customer engagement hypothesis results are not supported and show a negative and marginal relationship between CE and PI. This shows that value-based engagement factors, such as cost, millet quality, and convenience, do not influence stronger buying intentions for millet-based products among Gen Z. This result may be a potential challenge for marketers to study the gap between engagement activities and purchase decisions (31).

Purchase intention (PI) acts as a central mediator role in PD. Result highlights that influencer credibility and content relevance emphasise Gen Z's purchase decision is mostly mediated through PI (27, 28).

The findings suggest for marketer's target Gen Z consumers of millet-based products. Focus on credible influencers, and an authentic content investment may result in improving the purchase decisions, rather than focusing on customer value-based engagement. Additionally, prioritising the authentic content strategy is more influential than relevance. Finally, marketers should focus on calls to action, authentic content, and a clear message, which may lead to purchase action among Gen Z.

Conclusion

Influencer marketing plays a significant role in shaping Gen Z's purchase decisions towards millets. The impact of influencer credibility emerges as a key factor in shaping consumer attitudes and purchase intentions, reinforcing the need for authenticity and trust in influencer-driven promotions for the advertised product. To prove that the researcher did the survey, those who are active in following influencer content and engagement activities. Furthermore, purchase Intention serves as a critical mediator, converting consumer perceptions into purchase decision-making. Engagement quality matters more than quantity, as not all interactions lead to positive consumer actions. These insights suggest that marketers should prioritize credible influencers and adopt genuine, high-quality interactions to maximize marketing effectiveness. These results emphasize the importance of influencer credibility in driving consumer purchase decisions and suggest that marketers should prioritise credible influencers to enhance purchasing outcomes. Further, results will provide valuable insights for both academics and marketers on leveraging influencer-led strategies to promote millet among the Gen Z demographic.

Future scope of research study on Willingness to Pay (WTP) for millets in developing countries, focusing on nutritional value and the related health benefits among Gen Z.

Abbreviations

CE: Consumer Engagement, CFI: Comparative Fit Index, CR: Content Relevance, IC: Influencer Credibility, PCA: Principal Component Analysis, PD: Purchase Decision, PI: Purchase Intention, RMSEA: Root Mean Square Error of Approximation, TPB: Theory of Planned Behaviour, VIF: Variation Inflation Factor, WTP: Willingness to Pay.

Acknowledgement

Author Contributions

All the Authors of this article have equally contributed to developing this intellectual work.

Conflict of Interest

The Authors of this research hereby declare that there is no conflict of interest related to this research work.

Declaration of Artificial Intelligence (AI) Assistance

The authors declare no use of artificial intelligence (AI) for the write-up of the manuscript.

Ethics Approval

This study was conducted in accordance with the ethical guidelines and tenets.

Funding

References

1. Ghosh R, Mishra S, Jati H. Millet: The food for millennium. The Indian Journal of Nutrition and Dietetics. 2023;60(3): 460–9.
2. Sachan DS, Kumar R, Kumar P, *et al*. Millet's production and consumption in India. Just Agriculture. 2023;3(5): 275-83.
3. Singh S, Mugdha D, Maya D. Consumer demand, export and entrepreneurial opportunities of millets: An overview. International Journal of Agricultural Extension & Social Development. 2024;7(4): 530–4. https://doi.org/10.33545/26180723.2024.v7.i4g.571
4. Bellad MA, Belavadi NS. Nutritional and health benefits of millets. Ayushdhara. 2023;10(5): 20–25. https://doi.org/10.47070/ayushdhara.v10i5.1317
5. Kane-Potaka J, Anitha S, Tsusaka TW, *et al*. Assessing millets and sorghum consumption behaviour in urban India: A large-scale survey. Frontiers in Sustainable Food Systems. 2021;5:1-12. https://doi.org/10.3389/fsufs.2021.680777
6. Rizwana M, Singh P, Ahalya N, *et al*. Assessing the awareness of nutritional benefits of millets amongst women in Bangalore. British Food Journal. 2023;125(6):2002–18. https://doi.org/10.1108/BFJ-05-2021-0593
7. Freberg K, Graham K, McGaughey K, *et al*. Who are the social media influencers? A study of public perceptions of personality. Public Relations Review. 2011;37(1):90–92. https://doi.org/10.1016/J.PUBREV.2010.11.001
8. Pandey S, Bharti A, Bharti P. Central and State Government initiatives for mainstreaming millets and millets-based products. The Pharma Innovation. 2023;12(9):1415–19. https://doi.org/10.22271/tpi.2023.v12.i9o.22837
9. Giri PP, Ravichandran M, Parida SP, *et al*. India's millet consumption conundrum: A snapshot from the urban slums of eastern Odisha. Journal of Family Medicine and Primary Care. 2025;14(3):1003–8. https://doi.org/10.4103/jfmpc.jfmpc_1310_24
10. Sonkamble SS, Kumbhar AC, Pawar KR, *et al*. Sustainable cultivation of millets. International Journal of Multidisciplinary Research and Analysis. 2024;07(05):971-7. https://doi.org/10.47191/ijmra/v7-i05-20
11. Kanojia S, Gomadhi G, Kamalasundari S, *et al*. Exploring millet grains: nutritional benefits, processing advancements, and future directions for food security and health improvement. European Journal of Nutrition & Food Safety. 2024;16(5): 101–8. https://doi.org/10.9734/ejnfs/2024/v16i51426
12. Kumar A, Tomer V, Kaur A, *et al*. Millets: A solution to agrarian and nutritional challenges. Agriculture and Food Security. 2018;7(31):1-15. https://doi.org/10.1186/s40066-018-0183-3
13. Thangavel P, Pathak P, Chandra B. Millennials and Generation Z: A generational cohort analysis of Indian consumers. Benchmarking: An International Journal. 2021;28(7): 2157-77. https://doi.org/10.1108/BIJ-01-2020-0050
14. Filip A, Stancu A, Onişor LF, *et al*. Drivers of purchase intentions of Generation Z on eco-products. Sustainability. 2025;17(629):1-15. https://doi.org/10.3390/su17020629
15. Priporas CV, Stylos N, Fotiadis AK. Generation Z consumers' expectations of interactions in smart retailing: A future agenda. Computers in Human Behaviour. 2017;77: 374–81. https://doi.org/10.1016/j.chb.2017.01.058

16. Reijmersdal van EA, Walet M, Gudmundsdóttir A. Influencer marketing: Explaining the effects of influencer self-presentation strategies on brand responses through source credibility. Marketing Intelligence and Planning. 2024;42(7):1214–33.
https://doi.org/10.1108/MIP-03-2023-0125

17. Rahman KT. Influencer marketing and behavioural outcomes: How types of influencers affect consumer mimicry? SEISENSE Business Review. 2022;2(1):43–54.
https://doi.org/10.33215/sbr.v2i1.792

18. Suganya RV, Asan Bawa S. Exploring the influence of social media influencers' credibility on consumer behaviour: An empirical study. ComFin Research. 2024;12(1):82–92.
https://doi.org/10.34293/commerce.v12i1.6815

19. Lee XP, Yeap AL, Ooi KS, *et al*. The effect of Social Media Influencers (SMIs) on consumers' purchase intention. International Journal of Business and Technology Management. 2023;5(3):428-41.
https://doi.org/10.55057/ijbtm.2023.5.3.36

20. Retnosari MC. The role of customer engagement as mediation and deal proneness as moderation. Jurnal Ilmiah Manajemen Kesatuan. 2024;12(4):1121–30.
https://doi.org/10.37641/jimkes.v12i4.2705

21. Dutta J, Bhattacharya M. Impact of social media influencers on brand awareness: A study on college students of Kolkata. Communications in Humanities and Social Sciences. 2023;3(1):27–33.
https://doi.org/10.21924/chss.3.1.2023.44

22. Ghalib AS, Ardiansyah M. The role of Instagram influencers in affecting purchase decisions of Generation Z. Journal of Business, Management, and Social Studies. 2023;2(3):117–29.

23. Lou C, Yuan S. Influencer marketing: How message value and credibility affect consumer trust of branded content on social media Chen Lou and Shupei Yuan. Journal of Interactive Advertising. 2019;19(1):58-73.
https://doi.org/10.1080/15252019.2018.1533501

24. Akand F. Impact of social media influencers on purchase intentions: A comprehensive study across industries. International Journal of Multidisciplinary Research Updates. 2024;7(2):61-7.
https://doi.org/10.53430/ijmru.2024.7.2.0035

25. Dharma IBS, Hengky H, Ching LL, *et al*. The effect of influencer marketing on Gen Z purchasing intentions in emerging economies. Asian Pacific Journal of Management and Education. 2024;7(3):221-40.
https://doi.org/10.32535/apjme.v7i3.3540

26. Dwinggo Samala A, Rawas S. From likes to buys: Unveiling the impact of social media influencers on consumer behaviour and market dynamics. TEM Journal. 2024;13(3):2156-61.
https://doi.org/10.18421/tem133-43

27. Singh S, Mugdha D, Maya D. Consumer demand, export, and entrepreneurial opportunities of millets: An overview. International Journal of Agriculture Extension and Social Development. 2024;7(4):530-4.
https://doi.org/10.33545/26180723.2024.v7.i4g.571

28. Shah R, Pillai P. Consumer's environmental concern and its influence on their purchase intention: SEM approach. International Journal of Management. 2012;2(1):24-31.

29. Sagayannathan JG, Sudhagar DP. An extension of the theory of planned behaviour to predict the purchase intention of millet. International Journal for Multidisciplinary Research. 2024;6(5):1-11.

30. Kohli J, Gupta R. Impact of influencer marketing and user-generated content on millennials' purchase decisions. International Journal for Research in Applied Science and Engineering Technology. 2024;12(4):5679-701.
https://doi.org/10.22214/ijraset.2024.61376

31. Vivek SD, Beatty SE, Morgan RM. Customer engagement: Exploring customer relationships beyond purchase. Journal of Marketing Theory and Practice. 2012;20(2):122 -46.

32. Calder BJ, Malthouse EC, Schaedel U. An experimental study of the relationship between online engagement and advertising effectiveness. Journal of Interactive Marketing. 2009;23(4):321-31.

33. Sweeney JC, Soutar GN. Consumer perceived value: The development of a multiple-item scale. Journal of Retailing. 2001;77(2):203-20.

34. Ajzen I. The theory of planned behaviour. Organisational Behaviour and Human Decision Processes. 1991;50:179-211.

35. Freberg K, Graham K, McGaughey K, *et al*. Who are the social media influencers? A study of public perceptions of personality. Public Relations Review. 2011;37(1):90-92.
https://doi.org/10.1016/J.PUBREV.2010.11.001

36. Wicaksono TB. From likes to purchases: Analyzing the impact of Instagram marketing on online shoppers. Journal of Business, Management, and Social Studies. 2024;3(2):105–16.
https://doi.org/10.53748/jbms.v3i2.73

37. Tiwari A, Kumar A, Kant R, *et al*. Impact of fashion influencers on consumers' purchase intentions: Theory of planned behaviour and mediation of attitude. Journal of Fashion Marketing and Management: An International Journal. 2024;28(2):209-25.
https://doi.org/10.1108/JFMM-11-2022-0253

38. Tanwar AS, Chaudhry H, Srivastava MK. Influencer marketing as a tool of digital consumer engagement: A systematic literature review. Indian Journal of Marketing. 2021;51(10):27.
https://doi.org/10.17010/ijom/2021/v51/i10/166439

39. Chen Y, Qin Z, Yan Y, *et al*. The power of influencers: How does influencer marketing shape consumers' purchase intentions? Sustainability. 2024;16(13):1-18.
https://doi.org/10.3390/su16135471

40. Watson J. How to determine a sample size: tipsheet #60. University Park (PA): Penn State Cooperative Extension; 2001. p. 1-5.
https://www.scirp.org/reference/referencespapers?referenceid=2559589

41. Hair JF, Risher JJ, Sarstedt M, *et al*. When to use and how to report the results of PLS-SEM. European Business Review.2019;31(1):2-24.
https://doi.org/10.1108/EBR-11-2018-0203

42. Ohanian R. Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. Journal of Advertising. 1990;19(3):39-52.

43. De Vries L, Gensler S, Leeflang PSH. Popularity of brand posts on brand fan pages: an investigation of the effects of social media marketing. Journal of Interactive Marketing. 2012;26(2):83-91.

44. Hollebeek LD, Glynn MS, Brodie RJ. Consumer brand engagement in social media: conceptualization, scale development and validation. Journal of Interactive Marketing. 2014;28(2):149-65.

45. Hair JF. Multivariate data analysis. 7th ed. Upper Saddle River (NJ): Pearson Education; 2009. https://www.drnishikantjha.com/papersCollectio n/Multivariate%20Data%20Analysis.pdf

46. Cohen J, Cohen P, West SG, *et al*. Applied multiple regression/correlation analysis for the behavioural sciences. 3rd ed. New York: Routledge; 2013. https://www.taylorfrancis.com/books/mono/10.4 324/9780203774441/applied-multiple-regression-correlation-analysis-behavioral-sciences-jacob-cohen-patricia-cohen-stephen-west-leona-aiken