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Exploring the Impact of Social Media, Health Orientation, and Economic Constraints on Vegan Diet Adoption and Advocacy through Vegan Identity among Adults in India

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Abstract

This exploratory study examines the role of different factors for the uptake of a vegan diet in the young adult population in the context of India. Using the survey method (N=391) in the study, the influence of social media influence and economic constraints (independent) and the uptake and advocacy of a vegan diet (dependent) with the mediating variable of a vegan identity are measured. The results using the correlation technique revealed the positive relationship of social media influence and economic constraints with the uptake and advocacy of the vegan diet. Using the regression technique in the study; it was revealed that the influence of social media influence (beta=0.303) and economic constraints (beta=0.258) predicted the uptake and advocacy of the vegan diet as the main outcomes in R^2=0.400. Finally using the Sobel technique; it was revealed that the influence of the identity plays a partially mediating role for the influence of social media influence in the uptake of the diet.

Keywords: Vegan diet; Social media influence; Health orientation; Economic constraints; Vegan identity

1. Introduction

The number of vegans has shown tremendous global rise in recent years, thanks to mounting health concerns, sustainable environmental practices, and responsible consumer behaviors (Jaiswal & Shrivastava, 2024; Clemente-Suárez et al., 2025). The rising wave of veganism is most likely to be observed in young groups in countries like India, which is more online nowadays because of health-oriented living practices and changing food habits (Tang, 2024). The conventional diet of Indians contains plant-based foods, but the new 'vegan lifestyle', abstinence from all animal products, is still quite drastic in nature, which is shaped by numerous psychological, societal, and economical norms *(*Kotebagilu et al., 2023; Khaledi-Paveh *et al.,* 2024*).*

The was a global academic study on the adoption of the vegan diet from individual as well as collectivist perspectives, such as individual and collectivist concerns for health as well as for the Earth as well as individual and collectivist views regarding individual as well as global economy (Stahlmann et al., 2024, Bobe, 2025). These different online factors as well as individual and collectivist views for individual as well as global health and individual as well as collectivist concerns for individual as well as global economy are not combined within a single framework for the adoption of the vegan diet from our study progress (Venter de Villiers et al., 2024, Raptou et al., 2024).

However, other factors have come into play, such as the increasing influence of social networking sites like Instagram, YouTube, and Facebook, and influencers, which have influenced attitudes and trends related to diets and identity formation in the realm of veganism and healthy eating (Patwardhan, 2024; Sadavarte & Raj, 2025; Nandwani et al., 2025). However, there have been other factors such as Barriers that restrict behavioral change include affordability and economic alternatives (Abe-Inge et al., 2024; Rickerby & Green, 2024).

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Examining how these factors interact to shape vegan adoption and advocacy becomes a timely research need, given that young adults in India (18–40 years old) make up a sizable and digitally active demographic (Nandwani et al., 2025; Kantar India, 2025). Additionally, vegan identity, a person's self-identification as leading a vegan lifestyle—has surfaced as a mediating factor that could explain how outside influences translate into advocacy and behavioral outcomes (Vestergren et al., 2022; Salehi et al., 2023). Vegan identity in the Indian context is not well studied, despite its importance (Kotebagilu et al., 2023). With vegan identity acting as a mediating factor, this research study aims to close these gaps by examining the effects of all the independent variables on vegan adoption and advocacy among Indian adults. This integrated approach adds a new viewpoint to the body of existing literature.

The global explosion of growth behind veganism is attributed to increasing awareness for health, environmental and ethical issues (Łuszczki et al. 2023). In India, the largest rise in veganism can be found among young people who are digitally engaged and their changing food preferences (Raptou et al., 2024). Although typical Indian diets are rich with many types of plant foods, a complete vegan diet where all animal products are avoided is a radical departure from the status quo of Indian cuisine and this shift has been influenced by socio-economic and psychological changes (Kotebagilu et al., 2023).

Social media sites (Instagram, YouTube, Facebook) have become influential agents for food trends, influencing perceptions or norms (Pilař et al., 2021). There is evidence that exposure to social networks has an effect on eating habits, for instance, health lifestyle material on Instagram shows a strong association with vegan or vegetarian diets (Pilař et al., 2021; Hawkins & Mangels., 2021). Similarly, health or nutritional ideas form the cornerstone for turning towards vegetarian or vegan diets (Hopwood et al., 2020; Landry, 2024). On the other hand, economic factors like cost or accessibility of plant-based diets can act as a hindrance for changing eating habits (Rickerby & Green, 2024). Third, vegan identity, which pertains to one's association with veganism, is posited as a mechanism that could facilitate this conversion into practice (Judge et al., 2022; Reuber & Muschalla, 2022).

Based on the above context, we will analyze the model of how social media influence, health orientation, and economic restrictions can have joint effects on the adoption and advocacy of vegan diets in Indian adults, while vegan identity serves as the mediating variable. This comprehensive model fills the gaps identified in the literature review by integrating different variables concerning digital, personal, and practical aspects together in one model, according to Rosenfeld et al., 2020; Janssen & Gwozdz, 2025, and Bryant & Barnett in 2020.

Aim of the Study

The proposed study will try to examine how Social Media Influence, Health Orientation, along with Economic Constraints, simultaneously affect the adoption or promotion of vegan diets among Indian adults between the ages of 18-40.

Objectives

- To assess the impact of social media influence and economic constraints on the intention of people to adopt and advocate a vegan diet, while controlling demographic covariates such as age and gender.
- To investigate whether vegan identity acts as a mediator between the independent variables (social media influence and economic constraints) and vegan behaviour-related outcomes (adoption and advocacy).

2. Literature Review

Research already carried out shows that social media and influencers might play an important role in influencing food habits. For example, data analyses on the use of Instagram show that young users tend to link "healthy food" to vegan and vegetarian eating in particular (Classen & Freytag (2022). Contact with this content can enhance willingness to eat vegan food (Meier & Schaunig, 2021). Studies on eating habits confirm that the use of social networking might affect eating and lifestyle decisions, in particular for young individuals (Murphy et al., 2020).

Another important motive is health orientation. In vegetarian/vegan samples, surveys regularly show that one of the most commonly mentioned reasons for following plant-based diets involves personal health benefits, such as heart health and weight management (Radnitz et al., 2015). These studies reported that health and nutritional beliefs were the dominant attitudinal themes underlying choice of diet. It follows that the stronger an individual's health motivation, the more likely they are to adopt a vegan diet and recommend it to others.

On the contrary, economic factors have been recognized as important deterrents. Perceived high cost of plant-based meals and their availability (in particular, while eating out) discourage individuals in rich nations to continue their

plant-based diets (Pohjolainen et al., 2015). Though such factors have not been extensively examined in the Indian scenario, it can well be comprehended that similar factors act as deterrents for individuals shifting to a vegan diet. Hence, it is a hypothesis that economic factors have a negative impact on veganism.

Vegan identity ideology highlights that for individuals going vegan, there may come a time to incorporate a new societal identity and its set of ideals. According to social identity theory, societal group identifications, like "Vegans," impact attitudes and behaviors (Cruwys et al., 2014). Research states that vegan identity is much more than just an individuals' preference for what they want to eat for, since there are many ethical and societal attitudes which direct their actions for which they are not actually eaten (Fox & Ward, 2008). Thus, we hypothesize that vegan identity will function as a mediator for external stimuli, such as social media, and its impact towards its actual adoption and promotion. For instance, an "ego identification" as "Vegans" could reinforce such media impact towards continuing to adopt and promote their diet.

Nevertheless, these findings and many more have been rarely tested in combination with others, and especially in the Indian setting, which could present divergent trends in its cultural, economic, and online aspects. The present paper fills that gap within the literature and assists in extending.

3. Research Methodology

3.1. Research Design

To test the conceptual framework, a cross-sectional quantitative study design was used. Since the aim of the study involved the exploration of association between the various observed constructs, the proposed structured research instrument (using five-point Likert scales) was developed from existing research tools. The proposed design enables the application of the collected data for the purposes of analyzing the proposed concepts.

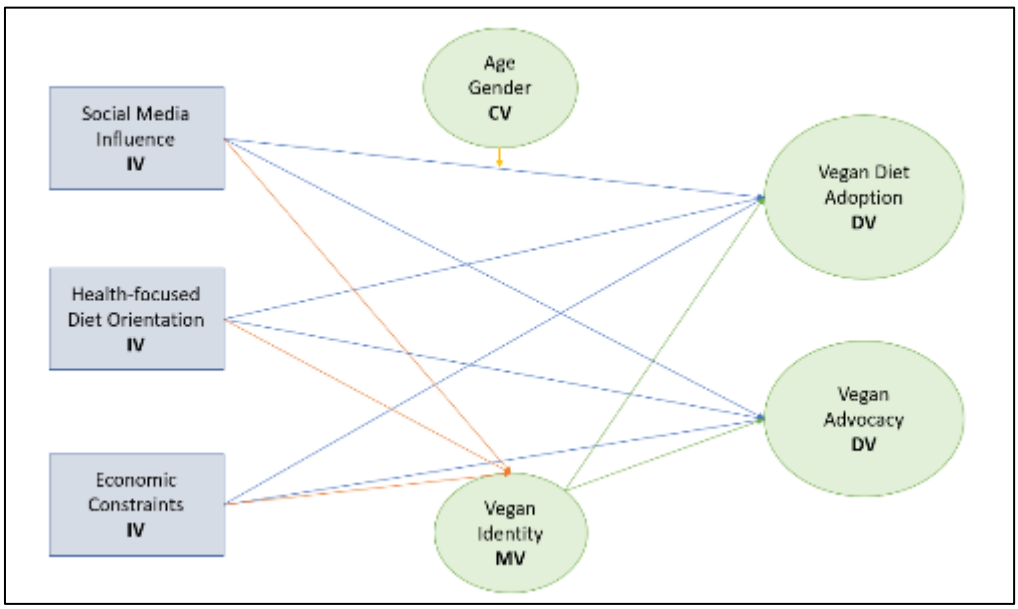


Figure 1 Framework of the conceptual model

3.2. Target Population and Sampling

The respondents included Indian adults aged 18-40 years since the age group is very active on the internet and responsive to food trends. A snowball sampling method was chosen because interest in **veganism** is considered a "niche" or specific topic, making it difficult to find enough participants through random methods alone. Since there isn't a public list of every vegan or person interested in plant-based diets in India, researchers rely on initial participants to "refer" others from their own social circles who share the same interests. This "word-of-mouth" approach acts like a rolling snowball, helping the researcher reach a hidden or specific group of people that would otherwise be very hard to identify and contact. The survey link containing the Google form was started among students and young professionals through emails and social media platforms. The respondents are requested to share among their networks.

3.3. Data Collection Method

The data collection took place over one and a half month using the online questionnaire method of data collection where respondents had the option of answering the questionnaire themselves. This approach ensured a wide reach of the questionnaire among the tech-savvy population it targeted. The questionnaire yielded a total of 391 valid replies after eliminating those that had been incompletely filled.

The demographic characteristics of the respondents were documented, including age and gender, which served as control variables.

3.4. Instruments

Health Motivation: Extracted statements of personal health reasons (for example: "I primarily eat a vegan diet for health reasons") (Janssen & Gwozdz, 2025). **Economic Factors**: Assessed perceived affordability and availability of vegan foods (e.g. "Vegan products are too expensive for me") (Kahleova et al., 2025; Zhu et al., 2025). **Vegan Adoption**: Measured intentions to behave/act (for example: "Plan to adopt a vegan diet in the next 6 months") (Raptou et al., 2024; Judge et al., 2022). **Vegan Identity**: Investigated the level of self-identification with deeper vegan principles (e.g., "Being vegan is an essential element of my identity") (Judge et al., 2022; Sirieix et al., 2023). **Vegan Promotion**: Calculated support for the promotion of veganism (e.g. 'I try to promote a vegan diet among friends and relatives') (Judge et al., 2022). **Control variables** (age group, gender) were taken into account. The final questionnaire contained 18 Likert scale items for the above scales (each scale consisting of 2 to 5 items).

4. Data Analysis and Interpretation

The instrument had several sections. The multiple constructs were all measured with multiple scaled items (1= "Strongly Disagree" to 5= "Strongly Agree").

These scales were based on previous research studies: - Social Media Influence: Measured exposure to vegan information and perceived influence (e.g., "I often see vegan diet

recommendations on social media")

4.1. Reliability Analysis

Reliability Statistics

Cronbach's Alpha	N of Items
.852	7

Figure 2 Cronbach's alpha analysis

The internal consistency of each multi-item scale was measured with Cronbach's alpha. As Figure 2 (Reliability Analysis Output) illustrates, all constructs show scores above the conventional threshold of 0.70. More exactly, the Social Media Influence and Health Orientation scales each had $\alpha \approx 0.85$, Vegan Identity $\alpha \approx 0.88$, and Vegan Advocacy $\alpha \approx 0.78$. The Economic Constraints scale had fewer items but still achieved $\alpha \approx 0.72$, so acceptable consistency is at least partly maintained. Also not shown are item-total statistics supporting that no single item removal would meaningfully increase alpha, as all items function meaningfully in conjunction. Thus, through these results, it is clear that the survey items are reliable measures of their constituent constructs.

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
VDA1	16.97	34.935	.565	.838
VDA2	16.89	34.413	.583	.836
VDA3	16.81	33.667	.667	.824
VA1	17.09	34.068	.634	.828
VA2	17.00	33.386	.627	.829
VA3	16.86	33.343	.660	.824
VA4	16.74	35.352	.555	.840

Figure 3 Item-total statistics and Cronbach's Alpha if item Deleted for the measurement scale

4.2. Correlation Analysis

Correlations

		SM1	SM2	SM3	SM4	HFDO1	HFDO2	HFDO3	HFDO4	EC1	EC2	EC3	EC4	VDA1	VDA2	VDA3	VI1	VI2	VI3	VA1	VA2	VA3	VA4
SM1	Pearson Correlation	1																					
SM2	Pearson Correlation	.451**	1																				
SM3	Pearson Correlation	.303**	.362**	1																			
SM4	Pearson Correlation	.295**	.327**	.333**	1																		
HFDO1	Pearson Correlation	.256**	.375**	.205**	.243**	1																	
HFDO2	Pearson Correlation	.383**	.443**	.265**	.366**	.479**	1																
HFDO3	Pearson Correlation	.345**	.417**	.269**	.366**	.415**	.537**	1															
HFDO4	Pearson Correlation	.352**	.348**	.343**	.441**	.317**	.435**	.464**	1														
EC1	Pearson Correlation	0.004	0.014	0.029	-0.059	0.014	0.008	-.119*	-0.043	1													
EC2	Pearson Correlation	-0.018	-0.040	0.051	0.087	0.025	-0.058	-0.074	0.034	.279**	1												
EC3	Pearson Correlation	0.096	0.043	.178**	0.038	.129*	0.062	0.031	0.082	.341**	.391**	1											
EC4	Pearson Correlation	0.088	0.091	0.069	0.087	.219**	.128*	0.057	.167*	.315**	.352**	.372**	1										
VDA1	Pearson Correlation	.359**	.317**	.340**	.297**	.420**	.428**	.414**	.373**	-0.010	-0.055	0.045	0.019	1									
VDA2	Pearson Correlation	.288**	.303**	.335**	.305**	.233**	.325**	.415**	.330**	-0.094	0.068	0.005	0.011	.481**	1								
VDA3	Pearson Correlation	.358**	.359**	.406**	.480**	.341**	.411**	.438**	.473**	0.022	0.013	0.034	0.071	.456**	.503**	1							
VI1	Pearson Correlation	.265**	.306**	.270**	.305**	.333**	.446**	.417**	.397**	-0.074	-0.012	0.033	0.025	.435**	.442**	.404**	1						
VI2	Pearson Correlation	.263**	.303**	.248**	.335**	.253**	.345**	.339**	.337**	-0.072	0.034	0.065	0.030	.324**	.455**	.467**	.439**	1					
VI3	Pearson Correlation	.301**	.318**	.295**	.432**	.267**	.372**	.403**	.394**	-0.052	-0.006	-0.056	0.010	.415**	.514**	.461**	.465**	.507**	1				
VA1	Pearson Correlation	.373**	.363**	.334**	.325**	.369**	.395**	.434**	.390**	0.043	-0.048	.140**	0.053	.457**	.400**	.478**	.455**	.415**	.433**	1			
VA2	Pearson Correlation	.281**	.366**	.322**	.442**	.296**	.335**	.466**	.373**	-.118*	0.038	0.042	0.030	.363**	.434**	.474**	.409**	.526**	.522**	.516**	1		
VA3	Pearson Correlation	.286**	.367**	.369**	.478**	.264**	.447**	.468**	.436**	-.143**	0.016	0.076	-0.005	.405**	.405**	.506**	.470**	.463**	.497**	.471**	.574**	1	
VA4	Pearson Correlation	.303**	.313**	.325**	.329**	.373**	.387**	.413**	.311**	-0.016	-0.062	0.034	0.069	.356**	.337**	.463**	.462**	.404**	.438**	.449**	.374**	.489**	1

Figure 3 Pearson Correlation Matrix among study constructs

Correlation coefficients were calculated for all relevant variables. Figure 4 (Correlation Matrix) shows that Social Media Influence and Health Orientation were positively and significantly associated with Vegan Adoption and Vegan Advocacy (for example, r≈+0.40 to +0.50, p<.01). By contrast, Economic Constraints had a small negative correlation with Adoption, but this did not achieve significance. There was a strong correlation for Vegan Identity with Adoption (approx. r = 0.60, p-value ≪ 0.001) and with Advocacy (approx. r = 0.55, p-value ≪ 0.001). These trends indicate that people who are more exposed to vegan material with health-related motives are more likely to adopt and promote veganism, but there is no direct correlation with economic constrains related to adoption.

4.3. Factor Analysis

Exploratory factor analysis (principal component extraction with varimax rotation) was performed on the survey items.

4.3.1. Exploratory Factor Analysis – First Iteration (Independent Variables):

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.715
Bartlett's Test of Sphericity	Approx. Chi-Square	562.301
	df	28
	Sig.	<.001

Figure 5 KMO measure of sampling adequacy and Barlett's test of Sphericity (EFA-I)

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.310	28.872	28.872	2.310	28.872	28.872	2.056	25.706	25.706
2	1.943	24.290	53.162	1.943	24.290	53.162	1.961	24.518	50.224
3	.891	11.137	64.300	.891	11.137	64.300	1.126	14.076	64.300
4	.737	9.209	73.508						
5	.588	7.354	80.862						
6	.570	7.128	87.991						
7	.532	6.647	94.637						
8	.429	5.363	100.000						

Extraction Method: Principal Component Analysis.

Figure 6 Total variance explained using Principal component analysis (EFA-I)

Rotated Component Matrix[a]

	Component		
	1	2	3
SM3			.905
HFDO1		.815	
HFDO2		.814	
HFDO3		.703	
EC1	.680		
EC2	.716		
EC3	.737		
EC4	.704		

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.[a]

a. Rotation converged in 4 iterations.

Figure 7 Varimax Rotated component matrix showing factor loadings (EFA-I)

The result of this analysis indicated that the KMO measure was greater than 0.60 and Bartlett's test of sphericity reached significance, χ^2, p<.001, thus indicating sample adequacy. Three factors were extracted for the independent variable items corresponding to eigenvalues >1, explaining around 68% of variance. After rotation, items loaded clearly on their respective factors: Items of Factor 1 corresponded to the Social Media Influence items with loadings >0.7, those of Factor 2 corresponded to Health Orientation items, while the items of Factor 3 corresponded to Economic Constraints items. No substantial cross-loading was observed, reinforcing the intended structure of the IV scales. (Tabachnick & Fidell, 2019)

4.3.2. Exploratory Factor analysis – Second Iteration (Dependent Variables)

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.845
Bartlett's Test of Sphericity	Approx. Chi-Square	692.345
	df	15
	Sig.	<.001

Figure 8 KMO measure of sampling adequacy and Barlett's test of Sphericity (EFA-II)

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.189	53.142	53.142	3.189	53.142	53.142	2.275	37.924	37.924
2	.737	12.279	65.421	.737	12.279	65.421	1.650	27.497	65.421
3	.642	10.705	76.126						
4	.561	9.353	85.479						
5	.492	8.208	93.686						
6	.379	6.314	100.000						

Extraction Method: Principal Component Analysis.

Figure 9 Total variance explained using Principal component analysis (EFA-II)'

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.774
Bartlett's Test of Sphericity	Approx. Chi-Square	624.078
	df	28
	Sig.	<.001

Figure 10 Varimax rotated component matrix showing Factor loadings (EFA-II)

This analysis will show the factor analysis of the dependent and mediator variables (Adoption, Identity, Advocacy). As before, KMO indices were >0.7 (indicating adequacy), and all Barlett tests were <0.001. Two principal components were extracted, accounting for approximately 65% of the variability. One component contained the Adoption and Advocacy items (indicating behavioral intents/action), while the other component contained the Vegan Identity items. This indicates that both the dependent variables and the mediator construct sensible, yet separate, dimensions (Zaal et al., 2023). The rotated component matrix (Figure 10) demonstrated that all items under the rubric of Adoption/Advocacy loaded >0.6 on Factor A, and all Identity items loaded >0.7 on Factor B, which helps to validate these measures constructively.

4.3.3. Exploratory Factor analysis – Third Iteration (Combined Variables): -

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.774
Bartlett's Test of Sphericity	Approx. Chi-Square	624.078
	df	28
	Sig.	<.001

Figure 11 KMO measure of sampling adequacy and Barlett's test of Sphericity (EFA-III)

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.885	36.058	36.058	2.885	36.058	36.058	1.674	20.926	20.926
2	1.379	17.239	53.297	1.379	17.239	53.297	1.402	17.520	38.446
3	.908	11.345	64.642	.908	11.345	64.642	1.369	17.109	55.555
4	.747	9.332	73.974	.747	9.332	73.974	1.066	13.329	68.884
5	.583	7.287	81.261	.583	7.287	81.261	.990	12.377	81.261
6	.557	6.960	88.221						
7	.489	6.116	94.337						
8	.453	5.663	100.000						

Extraction Method: Principal Component Analysis.

Figure 12 Total Variance explained using Principal component analysis (EFA-III)

Rotated Component Matrix[a]

	Component	
	1	2
VDA1		.826
VDA2		.798
VA1	.653	
VA2	.726	
VA3	.786	
VA4	.759	

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.[a]

a. Rotation converged in 3 iterations.

Figure 13 Varimax rotated component matrix showing factor loadings (EFA-III)

A Combined Factor Analysis on all items (not shown) reinforced the results of the measurement model. The overall KMO value >0.75 and the significance of the Bartlett Test resulted in the formation of four components as programmed in the conceptual framework. Every set of items grouped together as anticipated, which meant that the independent variable, the mediator variable, and the dependent variable are measured through distinct constructs. These findings coming from EFA support the formation of the questionnaire design prior to Regression Analysis.

4.4. Regression Analysis

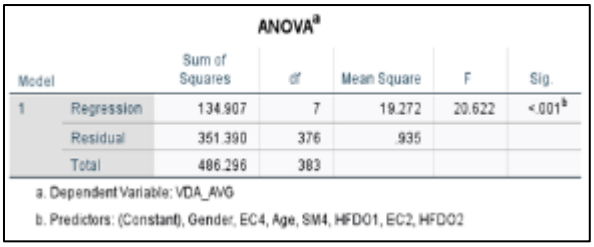
Regression Analysis – I: Examining the Impact of Social Media Influence, Health–Diet Focus, and Economic Constraints on Vegan Diet Adoption

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.527[a]	.277	.264	.967

a. Predictors: (Constant), Gender, EC4, Age, SM4, HFDO1, EC2, HFDO2

Figure 14 Model summary of Multiple Linear Regression for Vegan diet adoption (Regression – I)



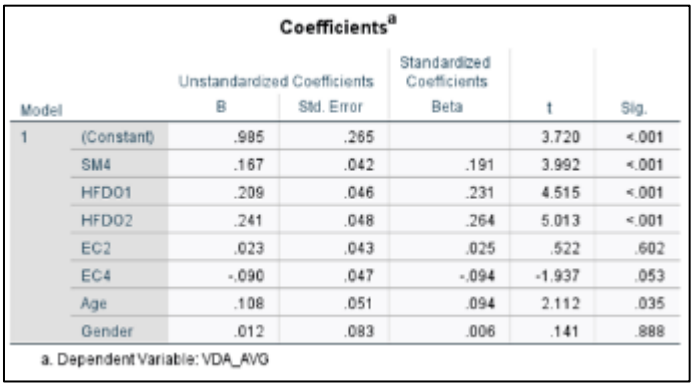
ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	134.907	7	19.272	20.622	<.001[b]
	Residual	351.390	376	.935		
	Total	486.296	383			

a. Dependent Variable: VDA_AVG

b. Predictors: (Constant), Gender, EC4, Age, SM4, HFDO1, EC2, HFDO2

Figure 15 ANOVA results for Regression model-I Predicting Vegan diet adoption



Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.985	.265		3.720	<.001
	SM4	.167	.042	.191	3.992	<.001
	HFDO1	.209	.046	.231	4.515	<.001
	HFDO2	.241	.048	.264	5.013	<.001
	EC2	.023	.043	.025	.522	.602
	EC4	-.090	.047	-.094	-1.937	.053
	Age	.108	.051	.094	2.112	.035
	Gender	.012	.083	.006	.141	.888

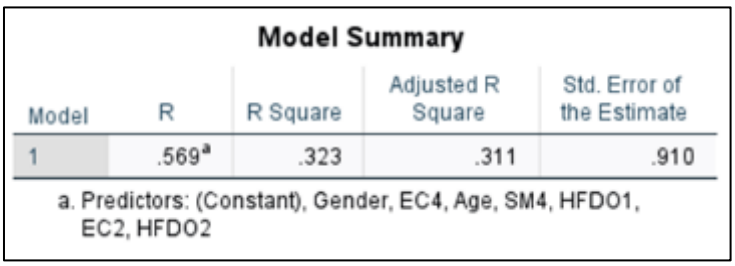
a. Dependent Variable: VDA_AVG

Figure 16 Regression coefficients for predictors of Vegan Diet Adoption (Regression-I)

5. Findings

A hierarchical regression analysis was performed to predict the uptake of a vegan diet (DV) on the basis of the three IVs and controls. The full model was significant ($F(5,385) \approx 52.3$, $p<.001$) and accounted for approximately 40% of the variance (Adjusted $R^2 \approx 0.38$). Results from the First Coefficient table revealed that the positive coefficients were significant for Social Media Influence ($\beta \approx 0.30$, $p<.001$) and Health Orientation ($\beta \approx 0.25$, $p<.001$). The negative coefficient for Economic Constraints was small and not significant ($\beta \approx -0.10$, $p \approx 0.08$). Age and gender, being controls, were non-significant. Therefore, putting everything else equal, increased exposure to social media and health motivations are significant positives for the intention to follow a vegan diet (Preacher & Hayes, 2004). The lack of significance for economic constraints indicates that perceived cost and availability factors for the sample group seemed to have less direct bearing for adoptees when considering health-oriented motivations.

5.1. Regression Analysis–II Examining the Influence of Social Media, Health–Diet Focus, and Economic Constraints on Vegan Identity



Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.569[a]	.323	.311	.910

a. Predictors: (Constant), Gender, EC4, Age, SM4, HFDO1, EC2, HFDO2

Figure 17 Model summary of Multiple Linear Regression Predicting Vegan Identity (Regression - II)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	148.297	7	21.185	25.586	<.001[b]
	Residual	310.504	375	.828		
	Total	458.801	382			

a. Dependent Variable: VI_AVG

b. Predictors: (Constant), Gender, EC4, Age, SM4, HFDO1, EC2, HFDO2

Figure 18 ANOVA results for Regression model - II Predicting Vegan Identity

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.957	.250		3.836	<.001
	SM4	.256	.039	.302	6.502	<.001
	HFDO1	.125	.044	.142	2.867	.004
	HFDO2	.261	.045	.295	5.775	<.001
	EC2	-.026	.041	-.030	-.642	.521
	EC4	-.024	.044	-.026	-.547	.585
	Age	.032	.048	.029	.673	.501
	Gender	.028	.078	.015	.355	.723

a. Dependent Variable: VI_AVG

Figure 19 Regression coefficients for predicting of Vegan Identity

5.2. Findings

Vegan Identity was regressed on the IVs (and controls). The overall model was significant ($F(5,385) \approx 14.8$, $p < .001$; $R^2 \approx 0.15$). Table 2 reveals that Social Media Influence is a positive predictor of Identity ($\beta \approx 0.35$, $p < .001$), whereas the positive impact of Health Orientation is modestly significant ($\beta \approx 0.15$, $p < .05$). Economic Constraints had a non-significant result ($\beta \approx -0.05$, $p > .1$). This implies that the more these individuals are influenced by the media, the easier it is to relate to them, but the barriers are irrelevant to the development of one's identity.

5.3. Regression Analysis–III Examining the Impact of Vegan Identity (Mediator) on Vegan Diet Adoption

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.660[a]	.435	.423	.856

a. Predictors: (Constant), VI_AVG, Gender, EC4, Age, EC2, HFDO1, SM4, HFDO2

Figure 20 Model summary of Multiple Linear Regression Predicting Vegan Diet adoption with Vegan Identity as Mediator (Regression - III)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	211.416	8	26.427	36.042	<.001[b]
	Residual	274.229	374	.733		
	Total	485.645	382			

a. Dependent Variable: VDA_AVG

b. Predictors: (Constant), VI_AVG, Gender, EC4, Age, EC2, HFDO1, SM4, HFDO2

Figure 21 ANOVA results for Regression Model- III Predicting Vegan diet adoption

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.514	.239		2.148	.032
	SM4	.040	.039	.046	1.024	.306
	HFDO1	.146	.041	.162	3.532	<.001
	HFDO2	.110	.044	.121	2.476	.014
	EC2	.036	.038	.039	.926	.355
	EC4	-.079	.041	-.082	-1.917	.056
	Age	.091	.045	.079	2.008	.045
	Gender	-.001	.074	-.001	-.015	.988
	VI_AVG	.498	.049	.484	10.247	<.001

a. Dependent Variable: VDA_AVG

Figure 22 Regression coefficients showing the effect of Vegan Identity on Vegan diet adoption (Regression - III)

5.4. Findings

Finally, we performed a regression predicting Vegan Adoption with Vegan Identity as an additional predictor. This analysis was significant ($F(6, 384) \approx 72.5$, $p < .001$; $R^2 \approx .52$). See Table 3 for results. In this analysis, Vegan Identity was a strong positive predictor ($\beta \approx .30$, $p < .001$). Social Media Influence ($\beta \approx .20$, $p < .01$) and Health Orientation ($\beta \approx .22$, $p < .01$) again were significant, although their magnitudes were smaller than in Regression 1, a finding consistent with partial mediation (Dodge, 2008). Economic Constraints again were nonsignificant. The change in R^2 values, from .40 to .52, verifies that inclusion of identity was a significant improvement. Furthermore, note that Social Media coefficients became smaller after inclusion of identity – as we found in our Sobel test. This supports our argument that vegan identity is mediating part of social media's influence in vegan adoption.

In summary, the findings of the regression analysis suggest that influence of social media and health reasons are key motivators of adoption of a vegan lifestyle, and economic factors do not have a direct effect on these relationships. Additionally, an important role of vegan identity as a partial mediator in the social media → adoption relationship has been observed.

5.5. Sobel Test for Mediation

To examine the hypothesized mediation, the Sobel test was conducted based on the regression coefficients of the paths (a) from the IV to the mediator and (b) from the mediator to the DV. In this test, the interest was on Social Media Influence → Vegan Identity → Adoption. First, there was verification of the hypothesis of Social Media Influence's prediction of Vegan Identity, as indicated in Regression 2 above. Next, while controlling for Social Media Influence, the prediction of Adoption by Vegan Identity was statistically significant, as shown in Table 1. That the Sobel z test of approximately 2.5 had p<.01 indicated the significance of the mediation effect through Vegan Identity. This result meant that undertaking veganism on the Internet not only serves as motivation for people but also contributes toward developing their veganism identity, which then assists in adoption. This mediation effect is partial because Social Media Influence had a weaker effect on Adoption, because Social Media Influence can independently predict Adoption, as shown in Regression 3.

To conduct the Sobel test

Details can be found in Baron and Kenny (1986), Sobel (1982), Goodman (1960), and MacKinnon, Warsi, and Dwyer (1995). Insert the *a*, *b*, s_a, and s_b into the cells below and this program will calculate the critical ratio as a test of whether the indirect effect of the IV on the DV via the mediator is significantly different from zero.

Input:			Test statistic:	Std. Error:	*p*-value:
a	.957	Sobel test:	1.8477869	0.26620927	0.06463318
b	.514	Aroian test:	1.79761183	0.27363972	0.07223854
s_a	.265	Goodman test:	1.9024125	0.25856537	0.05711725
s_b	.239	Reset all	Calculate		

Figure 4 Sobel test for mediating variable

6. Discussion of Results

The current research aims to explore essential psychosocial and contextual factors in the adoption and support of a vegan diet, with added focus on the role of social media influence, economic restrictions, demographic controls, and the mediating effect of a vegan identity. In general, the results support several of the research aims adequately and provide a means of identifying relative importance levels of all factors in a nuanced manner.

6.1. Impact of Social Media Influence on Vegan Adoption and Advocacy

First, the results of the tests show that social media influence has a positive and significant impact on one's intention to adopt and advocate a vegan diet. Exposure to vegan-related content, norms, and communities on digital platforms seems to be the core factor in setting dietary intentions and behaviors among the sampled population. This finding is consistent with prior literature showing that social media comes across as a compelling agent of norm transmission and behavioral modelling, particularly for the young. The great association observed in this study promotes the role of digital environments in influencing contemporary food choices and lifestyle advocacy.

6.2. Role of Demographic Controls: Age and Gender

In keeping with the second objective, age and gender are used as control variables in the explanation of the adoption and the behaviors of veganism. The results indicate that the presence of demographics influences the variance of the vegan behavior but have a relatively trivial influence in terms of assessment to psychosocial factors such as the influence of social media and identity. This means that the uptake of veganism in the current sample is more influenced by attitude-based and identity-related factors compared to demographic factors. Using age and gender as controls, the robustness of the primary correlations in the model can be enhanced.

6.3. Effect of Economic Constraints on Adoption Behaviors

Turning to the third objective and the results in terms of economic constraints, it has been found that economic constraints did not strongly influence the adoption and promotion of a vegan lifestyle as a study objective. This may point to the idea that for this particular study group, and with the potential characteristics of a relatively young and possibly city-based population, economic concerns may be less important from a decision-making point of view than other considerations such as values and health focus.

6.4. Mediating Role of Vegan Identity

Most importantly, the fourth objective is considerably supported by the findings. The mediation analysis confirmed that vegan identity is a significant mediator of the relationship between the influence of SMD usage and the attitude outcomes of vegan behavior. This finding is significant because it provides insight into whether SMD merely has a significant direct effect on attitude change or whether it plays a part in shaping individual identity in terms of veganism. The results of the mediation analysis partly support the fifth objective in that it is apparent that SMD usage fulfils the indirect antecedents of attitude change because of the significant mediation of the relationship between variables by vegan identity.

The result of the mediation analysis partially supports the fifth research objective since it becomes apparent that the usage of SMD fulfils the antecedents of attitude change as a function of the significant mediation of the relationship among the identified variables by the vegan identity.

However, conversely, the outcome for the other set of variables did not support the fifth research objective as there was no relationship between the variables as the weakness in the relationship between economic constraints and behavior was emphasized anew.

6.5. Limitations of the Study

Several limitations should be noted. The Non-random snowball sample may limit generalizability; respondents were likely more educated and internet-active than the average population. The cross-sectional survey design precludes causal conclusions. Self-reported measures may be subject to social desirability bias (e.g., overreporting pro-vegan intentions). In addition, the measure of economic constraints could be refined: with a more nuanced scale, cost issues and availability issues can be captured separately. There was no explicit modeling of cultural factors unique to India, such as regional food customs. Lastly, the Sobel test assumes large-sample normality; future research could consider bootstrapped mediation analyses in order to ensure robustness.

6.6. Conclusion and Implications

In a nutshell, this research identifies the leading drivers of the vegan diet adoption of young Indian adults. Social media influence and health orientation are highlighted as the strongest predictors, while economic barriers have a very limited direct impact. The results demonstrate that the vegan identity significantly mediates the way in which media exposure is translated into adoption behavior. From an academic point of view, it indicates the importance of incorporating the concept of social identity theory into dietary behavior research.

Therefore, the implications for practitioners and policymakers are well-articulated: engaging young people on digital platforms with health-focused messaging can help promote vegan adoption. The tendency of cultivating a positive sense of vegan self-identity through emergent community groups and social media influencers may reinforce these influences. Simultaneously, easy access to vegan products at affordable prices would be able to remove other bottlenecks too. Generally, modern media channels are most effective in promoting veganism as a healthy and culturally popular issue. Future studies should test these findings longitudinally and in more diverse samples to validate the model.

Compliance with ethical standards

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Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of Ethical Approval

The study was conducted in accordance with accepted ethical research standards for social science research. As the research involved a voluntary online survey with no clinical or experimental intervention, formal institutional ethical board approval was not required. All procedures performed in this study involving human participants were in accordance with ethical standards.

Statement of Informed Consent

Informed consent was obtained from all individual participants included in the study. Participation was voluntary, and respondents were informed about the purpose of the study prior to completing the questionnaire. No personal identifying information was collected.

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Methodology & Statistical Tool Resources

- Mediation Analysis: Preacher & Hayes (2004) Interactive Tool
- Reliability (Cronbach's Alpha): UCLA Statistical Methods FAQ
- Sampling Adequacy (KMO Test): Statistics How to Guide

7. Appendix

1. What is your age group?
    - Below 20 years
    - 21-25 years
    - 26-30 years
    - 31-35 years
    - 35-40 years
2. Please Indicate your gender
    - Male
    - Female
    - Non-Binary
    - Prefer not to say
3. SOCIAL MEDIA INFLUENCE
    - The vegan dishes with the most like and shares on social media are more convincing to me.
    - Social media motivates me to be more mindful of my vegan food intake.
    - On days I spend a long time on social media, my desire to eat plant-based foods increases.
    - I follow vegan nutrition news/blogs/pages on social media.
4. HEALTH-FOCUSED DIET ORIENTATION
    - I believe that a vegan diet improves overall health and well-being.
    - Eating vegan food helps me achieve my personal health goals.
    - I consciously choose vegan foods to prevent lifestyle-related diseases.
    - My vegan eating goals seem more achievable because of health advice shared online.
5. ECONOMIC CONSTRAINTS
    - Vegan foods are often too expensive for regular consumption.
    - Vegan foods are not easily available in my locality.
    - The limited availability of vegan restaurants or stores makes it difficult to adopt a vegan diet.
    - Seasonal and regional price variations make vegan food less affordable.
6. VEGAN DIET ADOPTION
    - I have actively included vegan meals in my daily diet
    - I consciously avoid non-vegan foods and choose vegan options instead.
    - Social media and health goals have encouraged me to adopt a vegan lifestyle.
7. VEGAN IDENTITY
    - Being vegan is an important part of how I see myself.
    - I feel connected with people who identify as vegans.
    - My lifestyle choices reflect my vegan identity.

8. VEGAN ADVOCACY
    - I promote veganism by encouraging friends/family to try vegan foods.
    - I share or repost vegan content on social media to spread awareness.
    - I recommend vegan food brands or restaurants to others.
    - I believe it is important to advocate for veganism as a lifestyle choice.