



The Power of Green Influencers: Leveraging Social Media for Environmental Sustainability in Fast-Moving Consumer Goods

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Abstract. This study investigates the correlation between green influencers and environmental sustainability within the fast-moving consumer goods (FMCG) sector, with a specific focus on natural and organic personal care products. It employs a quantitative research approach and a descriptive survey design to gather data from active social media users in Ghana, primarily utilizing platforms like Facebook, Instagram, Twitter, and YouTube. Structured questionnaires were distributed and collected via Google Forms to compile responses from the study participants. The analysis of this research delves into several variables, including the extent of a green influencer's social media following, the exposure of users to their content, the perceived credibility and authenticity of these influencers, and the effectiveness of their strategies in promoting environmental sustainability. The sample for this study comprises 376 respondents, and probit regression analysis is employed to scrutinize the data. The findings reveal a positive association between environmental sustainability and the extent of a green influencer's social media following. Furthermore, increased exposure to the content produced by green influencers, higher ratings for their credibility and authenticity, and the belief that their strategies are more effective are all linked to a heightened likelihood of environmental sustainability. Additionally, individuals with higher income levels and employment status are more likely to engage in practices that promote environmental sustainability. This research underscores the importance of harnessing the influence of green influencers to advocate for sustainable practices within the FMCG industry.

Keywords: Green Influencers, social media, environmental sustainability.

1 Introduction

Recent advancements in the realm of social media have brought about a transformative shift in communication and connectivity, facilitating global engagement in dialogues, knowledge sharing, and societal influence [1]. In the age of digital transformation, a distinct cohort known as "green influencers" has emerged, harnessing the capabilities of social media platforms to champion environmental sustainability [2]. These influencers assume a pivotal role in promoting environmentally conscious behaviors and

fostering positive societal change [3]. This introduction serves to contextualize the significance of social media impact and introduces the concept of green influencers.

The primary aim of our study is to comprehend the dynamics governing the influence of green influencers on behavioral changes within the Fast-Moving Consumer Goods (FMCG) sector through social media platforms [4]. We explore the relationship between critical variables, including the extent of a green influencer's social media following, exposure to their content, their perceived credibility and authenticity, and the effectiveness of various strategies within the FMCG sector. To address these research inquiries, we draw upon previous studies that have examined the nexus between social media influencers and environmental behavior modification [5]. Prior research has underscored the potential of green influencers in heightening awareness and endorsing eco-friendly attitudes and behaviors [6]. Our study seeks to offer a more profound insight into the mechanisms of their influence and the factors contributing to their efficacy [7].

Theoretical frameworks and prior research in this domain have underscored the significance of credibility, authenticity, and the selection of social media platforms in determining the impact of environmental advocacy endeavors [8,9]. Our research distinguishes itself by its focus on the interplay between green influencers, their social media followings, and their effectiveness within the FMCG industry [10]. Through this emphasis on green influencers and their strategies, we address existing gaps in research and provide empirical evidence that can inform tactics for harnessing social media to advance environmental sustainability [11]. This introduction delineates the theoretical context and underscores the uniqueness of our research.

Consequently, the objective of our study is to garner valuable insights into optimizing the potential of green influencers in promoting environmental sustainability. Through quantitative analysis, we aspire to elucidate the connection between green influencers and their impact on the FMCG sector. Our ultimate goal is to furnish recommendations that can enhance the effectiveness of green influencers in advocating for environmentally responsible practices through social media channels.

2 METHOD

The study embraced a quantitative approach rooted in a positivist worldview, employing a descriptive survey design [12]. This research was carried out in the context of Ghana's Fast-Moving Consumer Goods (FMCG) industry, with a specific focus on natural and organic personal care products. The study targeted consumers of FMCGs in Ghana who actively engaged with various social media platforms. Participants were selected from platforms such as Facebook, Instagram, Twitter, and YouTube, based on their association with followers of green influencers who advocate for environmental sustainability. For data analysis, the study employed the probit model, which is particularly suitable when dealing with a binary response variable. In this model, the response variable can assume only two possible outcomes, typically denoted as 1 and 0. The empirical model utilized in the study is expressed as follows:

(1)

Where ES is the environmental sustainability in natural and organic personal care products (dichotomous dependent variable), SGIF is the green influencer's social media following, EGIC is exposure to green influencers' content on social media, CAGI is the credibility and authenticity of green influencers, and EST is the effectiveness of their strategies, DF represents demographic variables such as income level, gender, age and β_0 , β_1 , β_2 , β_3 , and β_4 are the coefficients and ε represents the error term.

3 RESULT AND DISCUSSION

The results and discussion cover the reliability analysis, descriptive statistics and probit regression analysis. The findings of the reliability analysis demonstrate that the internal consistency of all constructs is adequate, with Cronbach's alpha coefficients ranging from 0.846 to 0.927, indicating good to excellent reliability. This implies that the components comprising each construct exhibit consistent measurement of the intended concepts and may be deemed resilient indicators for subsequent examination and comprehension in the investigation of environmental sustainability in natural and organic personal care commodities

Table 1. Descriptive Statistics

	N	Min	Max	Mean	SD	Skewness		Kurtosis	
						Stat	Std. Err	Stat	Std. Err
ES	376	0	1	0.80	.398	-1.531	0.126	0.347	0.251
SGIF	376	2.00	7.00	5.531	1.162	-1.413	0.126	1.416	0.251
EGIC	376	1.00	7.00	5.029	1.451	-1.222	0.126	0.650	0.251
CAGI	376	1.00	6.75	5.019	1.325	-1.682	0.126	2.398	0.251
EST	376	1.25	7.00	4.918	1.245	-1.232	0.126	1.420	0.251

ES: environmental sustainability in natural and organic personal care products. SGIF: green influencer's social media following. EGIC: exposure to green influencers' content on social media. CAGI: the credibility and authenticity of green influencers, and EST: the effectiveness of green influencer's strategies

The findings displayed in Table 1 provide a general comprehension of the variables associated with environmental sustainability in natural and organic personal care products. They disclose the attitudes, perceptions, and exposure levels of respondents, which are valuable for the study's further analysis and interpretation.

Table 2. Green Influencer and Environmental Sustainability

	Probit Model	Logit Model
SGIF	0.752* (0.022)	3.399* (0.020)
EGIC	0.533***	1.364**

	(0.000)	(0.009)
CAGI	0.171**	2.545***
	(0.012)	(0.000)
EST	2.196**	0.027*
	(0.019)	(0.022)
Age	0.013	1.039
	(0.901)	(0.210)
Gender	0.805**	3.758**
	(0.016)	(0.014)
Income Level	0.173**	1.371**
	(0.012)	(0.008)
Employment Status	0.535***	2.550***
	(0.000)	(0.000)
Constant	-1.640**	0.067**
	(0.04)1	(0.046)
Observation	376	376
Pseudo R ²	0.673***	0.463***
LR Chi ²	75.61	74.38
Log likelihood	-184.652	-148.669
Hosmer-Lemeshow	(0.4868)**	(0.5321)**
AIC	315.339	316.573
BIC	350.70	351.939

P<0.001, P<0.05, P<0.01 respectively. *ES*: environmental sustainability in natural and organic personal care products. *SGIF*: green influencer's social media following. *EGIC*: exposure to green influencers' content on social media. *CAGI*: the credibility and authenticity of green influencers, and *EST*: the effectiveness of green influencers' strategies

Table 2 presents the probit regression results on consumers' perception of natural and organic personal care products as environmentally sustainable. A sensitivity and robustness test was conducted on the same dataset to ensure the model's reliability and accuracy. The study reveals that a higher social media following of green influencers is linked to a higher likelihood of environmental sustainability in the FMCG sector, particularly in natural and organic personal care products. Exposure to green influencers' content, higher ratings for their credibility and authenticity, and perceived effectiveness of their strategies are also linked to a higher likelihood of environmental sustainability. Additionally, higher income levels and employment status are associated with a greater likelihood of environmental sustainability. The results are consistent across different regression techniques, supporting the robustness of the findings. The research supports a relationship between green influencers and environmental sustainability in FMCGs, particularly in natural and organic personal care items [11,13].

The study found that the size of a green influencer's social media following positively influences environmental sustainability promotion. This aligns with previous research indicating that people are more susceptible to the impact of influencers with a larger presence and wider audience reach. Exposure to green influencers' content on social media also increased the probability of environmental sustainability. This is consistent with previous research highlighting the influence of social media influencers on consumer purchase intentions. The credibility and authenticity of green influencers also had a positive effect on environmental sustainability, underscoring the importance of credibility and authenticity in shaping people's reactions to environmental communications. The study also aligns with the Elaboration Likelihood Model, which suggests that individuals are more likely to rely on messages from credible sources [14]. Authenticity in persuasive communication is crucial for establishing trust and credibility [15].

The study found a significant positive correlation between perception of green influencers' strategies' effectiveness and the likelihood of achieving environmental sustainability. The findings suggest that persuasive methods and tactics, such as framing messages and storytelling, can significantly influence individuals' attitudes and actions. This highlights the importance of formulating and executing effective tactics that align with the intended recipients, aligning with existing research on persuasive communication and behaviour modification. Thus, employing effective tactics is crucial for swaying individuals' reactions [15].

The study found a significant correlation between income and employment status and environmental sustainability. Higher income levels and employment were found to be positively correlated with a greater likelihood of engaging in environmentally sustainable practices [16]. This suggests that individuals with higher socio-economic status have more access to resources and opportunities for environmentally conscious consumption behaviors, which aligns with previous research highlighting the impact of socioeconomic variables on ecological conduct.

The research contributes to the discourse on environmental sustainability and eco-friendly consumption promoted by green influencers in the consumer goods industry. It highlights the positive correlation between influencers and ecological sustainability, highlighting factors like social media audience, content exposure, perceived trustworthiness, genuineness, and tactics efficacy.

4 CONCLUSION

The study explores the impact of green influencers on environmental sustainability in the FMCG sector, focusing on natural and organic personal care products. It employed probit and logit models to assess variables such as social media following, exposure to content, credibility and authenticity of green influencers, and the efficacy of their strategies. The findings provide evidence for the positive impact of green influencers on environmental sustainability in the FMCG sector. The study emphasizes the importance of social media following and exposure to green influencers' content in driving eco-friendly consumption behaviours. The credibility and authenticity of green influencers are crucial factors in influencing individuals' likelihood to engage in environmental sustainability practices. The effectiveness of green influencers' strategies also plays a significant role in promoting positive environmental change. The study suggests that higher income levels and employment status are associated with a greater likelihood of environmental sustainability, indicating the potential influence of socioeconomic factors. From a practical standpoint, companies operating in the FMCG industry can collaborate with green influencers to promote their eco-friendly products and amplify their sustainability messages. However, the study has limitations, including self-reported measures and being limited to FMCGs. Future research could investigate additional industries and variables that may affect environmental sustainability.

References

1. Li X, Xu M, Zeng W, Tse YK, Chan HK. Exploring customer concerns on service quality under the COVID-19 crisis: A social media analytics study from the retail industry. *J Retail Consum Serv.* 2023;70:103157.
2. McLean N. *Protest Movements as Media Vehicles of the Brazilian New Right: A Study of Populist Discourses.* Springer; 2022.
3. Esquer J, Munguia N, Velazquez L. Increasing Young People's Environmental Awareness. *Palgrave Encycl Urban Reg Futur.* Springer; 2023. p. 904–13.
4. Chagwasha M, Mhlanga D, Mveku B, Matizanadzo N, Dzingirai M. Influence of Green Marketing Strategies on Consumer Purchase Decision: Evidence from Fast-Moving Consumer Goods Industry in Zimbabwe. *Fourth Ind Revolut Africa Explor Dev Implic Smart Technol Africa.* Springer; 2023. p. 327–43.

5. Chen A, Zhang J, Liao W, Luo C, Shen C, Feng B. Multiplicity and dynamics of social representations of the COVID-19 pandemic on Chinese social media from 2019 to 2020. *Inf Process Manag.* 2022;59:102990.
 6. Holiday S, Densley RL, Norman MS. Influencer marketing between mothers: The impact of disclosure and visual Brand promotion. *J Curr Issues Res Advert.* 2021;42:236–57.
 7. Shah D, Webster E, Kour G. Consuming for content? Understanding social media-centric consumption. *J Bus Res.* 2023;155:113408.
 8. Jalali SS, Khalid HB. The influence of Instagram influencers' activity on green consumption behavior. *Bus Manag Strateg.* 2021;12:78–90.
 9. Rishi B, Agarwal S. An Unexpected Journey: Designing a Framework to Use Social Media for Consumer Well-Being. *Deal with Soc Responsible Consum Stud Mark.* Springer; 2023. p. 103–28.
 10. Boulianne S, Ohme J. Pathways to environmental activism in four countries: social media, environmental concern, and political efficacy. *J Youth Stud.* 2022;25:771–92.
 11. Yıldırım S. Do green women influencers spur sustainable consumption patterns? Descriptive evidences from social media influencers. *Ecofeminism Clim Chang.* 2021;2:198–210.
 12. Sukmawati FN, Haryono NA. Cointegration of Macroeconomics Variables and Dow Jones Industrial Average Index on the Composite Stock Price Index In 2015-2019. *J Bus Manag Rev [Internet].* 2023 [cited 2023 Feb 25];2:178–91. Available from: <https://profesionalmudacendekia.com/index.php/jbmr/article/view/110>
 13. Breves P, Liebers N. Greenfluencing. The Impact of Parasocial Relationships with Social Media Influencers on Advertising Effectiveness and Followers' Pro-environmental Intentions. *Environ Commun.* 2022;13:1–15.
 14. Petty RE, Cacioppo JT, Petty RE, Cacioppo JT. The elaboration likelihood model of persuasion. Springer; 1986.
 15. Ju I, Lou C. Does Influencer–Follower Relationship Matter? Exploring How Relationship Norms and Influencer–Product Congruence Affect Advertising Effectiveness across Product Categories. *J Interact Advert.* 2022;22:157–77.
- Majali T, Alkaraki M, Asad M, Aladwan N, Aledeinat M. Green Transformational Leadership, Green Entrepreneurial Orientation and Performance of SMEs: The Mediating Role of Green Product Innovation. *J Open Innov Technol Mark Complex.* 2022;8:191.

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