

Eco-Influence: How Social Media Leaders Shape Public Perceptions of Environmental Politics

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Abstract

As environmental concerns grow, social media has become a crucial tool for advocacy, with influencers playing a key role in shaping public awareness and engagement. These influencers simplify complex environmental issues using storytelling, visuals, and personal narratives, making sustainability discussions more accessible to the public. However, questions remain about their effectiveness, particularly in terms of informativeness, persuasiveness, and their overall influence on public attitudes. This study examines how social media influencers impact environmental politics, focusing on gender differences in perceived informativeness, attitudes, and opinion leadership. It also explores whether social media usage frequency affects perceptions of influencers' persuasiveness and ability to simplify environmental issues. Finally, it investigates how informativeness and political simplification shape public attitudes toward influencers. Using a quantitative online survey with 101 participants, the study employs statistical analyses to assess these relationships. Findings reveal no significant gender-based differences in attitudes toward influencers or their perceived informativeness. However, frequent social media users are more likely to perceive influencers as effective in simplifying environmental topics. Additionally, informativeness strongly predicts public attitudes, while persuasiveness has a moderate effect, and simplification has minimal influence. This research highlights the importance of credible and well-structured content in environmental advocacy. It suggests that influencers should prioritize delivering clear, relevant, and evidence-based information while refining their persuasive techniques. The study contributes to understanding digital environmental communication and provides insights for improving influencer-led activism.

Keywords: Social Media Influencers, Environmental Politics, Informativeness and Persuasiveness, Public Perception, Digital Advocacy

Introduction

Rising importance of environmental matters, like climate change and sustainable development, has compelled the development of efficient communication approaches to enhance public awareness and involvement. Social media platforms have emerged as a critical space for environmental advocacy (Ter-Mkrtychyan & Taylor, 2023), which offer an accessible and dynamic medium for disseminating information (Hund, 2025). Social media influencers, among the diverse groups utilizing these mediums, have earned considerable focus for their capacity to influence public views and attitudes.

Influencers on social media serve both as communicators and proponents in environmental politics, often transforming intricate environmental subjects into engaging stories with personal anecdotes, visual narratives, and emotional resonance, to captivate their audiences (Dekoninck & Schmuck, 2022; Nazir & Wani, 2024). This capability has amplified their role as prospective catalysts for transformation, yet it has also cast doubt on the character and strength of their impact. Particularly, the caliber and lucidity of the content shared by influencers, their persuasive power towards audiences, and their extensive effect on public perception demand more in-depth examination (Shahabuddin, 2024; Suryaputra et al., 2024). The degree of informativeness in the content of influencers mirrors their proficiency in delivering distinct, relevant, and timely environmental information (Sun & Xing, 2022). Political dynamics in the environment frequently encompass intricate and technical subjects, posing a challenge for public understanding. Influencers, through making these matters clearer and contextual, act as go-betweens connecting scientific discussions with real-world comprehension (Hajri & Daife, 2024). At the same time, persuasiveness—their ability to present compelling arguments (Buvár et al., 2023)—determines whether their messages motivate behavioral or attitudinal changes among their audiences. The success of influencers in motivating behavioral or attitudinal changes often hinges on their rhetorical strategies (Vilkaitė-Vaitonė, 2024), such as using emotional appeals, leveraging personal authenticity, or aligning their messages with audience values.

The credibility of influencers as influential figures in environmental politics is intimately linked to these elements. These leaders, regarded as trustworthy and authoritative individuals (Yaşa & Birsen, 2024), can mold public conversations by steering people's perceptions and actions on environmental matters. Influencers' public perception is key to shaping their influence. Positive views can bolster audience involvement, whereas skepticism or distrust may undermine the impact of highly informative and convincing material (Jalali & Khalid, 2021). The interplay between these dimensions—informativeness, persuasiveness, opinion leadership, and public attitudes—highlights the complexity of influencers' roles in environmental advocacy.

Influencers, capable of filling knowledge voids and driving action, are impacted by multiple elements such as the makeup of the audience and levels of participation. For example, variations in gender dynamics can alter people's view of influencer informativeness, their viewpoints on them, and their acknowledgment of influencers as leaders of opinion (Yıldırım, 2021; Xie et al., 2024). Likewise, the regularity of social media engagement might affect how

frequently users see influencers as influential or adept at easing complex political matters. Regular users may find themselves more attuned to their communication methods, while occasional users might approach these content skeptically or with enough attention to establish firm perceptions (Li et al., 2024; Shamsi et al., 2022; Vilkaitė-Vaitonė, 2024).

Previous research has delved into how influencers mold societal views on diverse issues (Dekoninck & Schmuck, 2022; Shahabuddin, 2024; Xie et al., 2024; Yaşa & Birsen, 2024), yet there's still a lack of comprehension regarding their distinct influences within the realm of environmental politics. The focus of existing studies has predominantly been on the widespread effects of social media on enhancing public knowledge and involvement, frequently neglecting the direct role of demographic elements like gender and behavioral aspects, for instance, the frequency of usage of social media, in molding influencer views. Furthermore, there's a noticeable scarcity of studies on the specific attributes of influencer content, like its informative content and its capacity to distill complex political matters, in directly impacting public perceptions. Solving into these deficiencies is vital for improving communication tactics and optimizing the impact of environmental activism.

Against this backdrop, this study seeks to address three key research objectives:

- whether there is a significant difference between males and females in terms of perceived informativeness, attitudes, and opinion leaders;
- whether there is a significant difference among users of different social media usage frequencies in terms of perceived persuasiveness and perceived simplification of politics;
- whether perceived informativeness and perceived simplification of politics contribute to shaping attitudes toward social media influencers in the context of environmental politics.

These objectives aim to fill critical gaps in understanding the dynamics of influencer impact and provide actionable insights for more effective environmental advocacy through social media.

Methodology

Research Design

The study adopted a quantitative online survey design to investigate how social media influencers affect public perceptions and attitudes toward environmental politics. This design was selected for its ability to systematically collect data from a large and diverse group of participants (Gray, 2022), which leveraged the accessibility and reach of online platforms. By administering the survey online, the study ensured greater convenience for participants, which enhanced response rates and facilitated the inclusion of geographically dispersed individuals.

The quantitative survey approach was well-suited for this research as it allowed for the efficient collection of data on multiple variables, such as perceived informativeness, persuasiveness, attitudes, and opinion leadership. By focusing on quantifiable measures, this design ensured objectivity and enabled the use of statistical methods to identify patterns, test hypotheses, and draw meaningful conclusions (Singh, 2023). Moreover, the structured nature of the survey allowed for the systematic comparison of responses across different demographic groups and social media usage patterns (Singh, 2023). This facilitated the detection of significant differences and trends, which were essential for addressing the research objectives. The use of an online survey further aligned with the digital focus of the

research to capture the behaviors and perceptions of social media users within their natural online environment, thereby enhancing the ecological validity of the findings.

Sampling Method

The research employed a snowball sampling approach, involving the initial recruitment of participants, leading to subsequent referrals from their personal networks, thus forming a referral sequence (Wu & Thompson, 2021). Snowball sampling was notably appropriate for this study as it made it easier to reach a distinct group: social media users actively involved in environmental politics content created by influencers. Traditional probability sampling techniques may have found it challenging to successfully identify this particular demographic group.

The study's quantitative survey format emphasized the importance of a large enough sample for comprehensive statistical examination. Snowball sampling facilitated effective participant enlistment and leveraged pre-existing social networks to rapidly and economically enlarge the sample (Pasikowski, 2024). This approach was also in sync with the study's digital format, allowing participants to readily share the survey link within their online networks, boosting both reach and participation rates.

Snowball sampling's shortcomings, like the likelihood of bias and lower applicability (Wu & Thompson, 2021), warranted its application in this research due to its explorative character and the importance of gathering feedback from a participatory group. This method allowed for incorporating a wide array of participants on various social media channels, facilitating the collection of data that was both specific and extensive.

Data Collection Procedure

This study employed an online survey for gathering data. The survey, distributed between November 2024 and December 2024, was aimed at a varied segment of social media users. Its online nature allowed participants to fill out the survey whenever they saw fit, thereby enhancing participation rates and facilitating the incorporation of individuals spread across different locations (Aarons, 2020).

At the outset, select prospective participants were pinpointed in the research group's social networks and invited to join the study. They were briefed on the research objectives and structure, encompassing the voluntary aspect and guarantee of privacy. After securing consent, they engaged in the online questionnaire. These early participants were also urged to disseminate the survey link to their network, aligning with the study's eligibility standards. This approach, a hallmark of the snowball sampling method, facilitated the organic broadening of the research's scope, connecting with various social groups and communities. To maintain uniformity and openness, each prospective participant received a uniform invitation, outlining the study's goals and guidelines for response execution.

Throughout the data gathering phase, 101 legitimate responses were collected, all anonymized for participant confidentiality and ethical adherence. Once the data collection phase concluded in December 2024, these responses were downloaded, structured, and readied for statistical evaluation.

Measurement Scales

Data were collected from an online questionnaire titled *Social Media Influencers on Environmental Politics*. The survey included a detailed introduction outlining the purpose of the research, confidentiality measures, and instructions for completing the questionnaire. Participants were informed that their responses would remain anonymous and would only be used for academic purposes. The questionnaire was designed to ensure clarity and ease of understanding, encouraging accurate and thoughtful responses.

The survey was divided into several parts, each aimed at collecting distinct data forms. The initial section, encompassing both multiple-choice and open-ended queries, concentrated on gathering demographic details of participants. Key factors such as age, gender, education, and nationality were included, establishing a foundational understanding of their backgrounds. It also delved into their patterns of social media use. The questions dealt with aspects like how often they used social media, the average daily duration on social media, and the particular platforms they frequently accessed. Their design was to encapsulate a broader view of respondent interaction with social media, crucial for framing their views and opinions about influencers and environmental politics. The data collected here was not only crucial for demographic evaluation of the group but also for further analysis at different stages of the data analysis.

Following it were six sections, with each section focusing on a specific issue of interest, including exposure to influencers (three items), perceived simplification of politics (four items), political cynicism (three items), political interest (two items), perceived informativeness (six items), perceived persuasiveness (five items), attitudes (seven items), behavioral intention (four items), subjective norm (five items), and opinion leaders (six items). All these items were measured using a five-point Likert scale ranging from one (strongly disagree) to five (strongly agree). The use of a five-point Likert scale was deliberate, as it provided a balanced range of options while avoiding the potential complexity or confusion associated with scales featuring more points, which facilitated easier interpretation of data and ensured clarity in the statistical analysis and presentation of results (Bolton & Brace, 2022). However, for the purpose of this research, only data related to perceived simplification of politics, perceived informativeness, perceived persuasiveness, attitudes, and opinion leaders were included in the analysis and the report.

Data Analysis Techniques

The organized data in Excel were computed into Statistical Package for Social Sciences 29.0 for analysis. First, descriptive statistics were conducted to summarize the demographic characteristics of the participants, such as gender, age, nationality, and frequency of social media usage. This step also involved examining the mean and standard deviation of the key variables: perceived informativeness, perceived persuasiveness, attitudes toward influencers, and opinion leadership.

Next, inferential statistics were employed to address the research questions. The independent samples *t*-test was conducted to determine whether significant differences existed between males and females in perceived informativeness, attitudes, and opinion leadership. Additionally, one-way analysis of variance (ANOVA) was used to assess differences in perceived persuasiveness and perceived simplification of environmental politics across

groups with varying frequencies of social media usage. Finally, multiple regression analysis was performed to explore the predictive relationships between perceived informativeness and perceived simplification of politics on attitudes toward influencers. This analysis allowed for an understanding of how these variables contributed to shaping public attitudes toward social media influencers in the context of environmental politics.

Before running the inferential analysis, the assumptions for these tests were carefully checked to ensure the validity of the results. These included normality and homogeneity of variance for both the independent samples t-test and one-way ANOVA; for the multiple regression analysis, additional assumptions were examined, such as normality of residuals, the absence of outliers, multicollinearity, linearity, and homoscedasticity of residuals (Bennett et al., 2022). This methodological rigor ensured that the conclusions drawn from the data were reliable and supported by robust statistical evidence.

Findings

Demographic Profiles

The demographic information of the study participants (N = 101) was analyzed and reported in Table 1. The characteristics focused on included gender, age, educational levels, employment status, nationality, and geographical locations. Moreover, given the nature of the study, participants' characteristics regarding the frequency, duration, and level of engagement in social media use were also analyzed.

Table 1

Demographic Characteristics of Participants

Characteristic	<i>n</i>	%
Gender		
Male	41	40.6
Female	60	59.4
Age		
17-21 years old	46	45.5
22-25 years old	35	34.7
26-29 years old	9	8.9
30-32 years old	6	5.9
33-35 years old	5	5.0
Highest educational level		
High school or equivalent	11	10.9
Some college/vocational training	34	33.7
Bachelor's degree	37	36.6
Master's degree	14	13.9
Doctorate/Professional degree	5	5.0
Employment		
Student	66	65.3
Self Employed/Gig Worker/Part Timer	9	8.9
Employed	15	14.9
Entrepreneur (Own Company)	10	9.9
Unemployed	1	1.0
Nationality		
China	59	58.4
Malaysia	14	13.9

Japan	6	5.90
Korea	5	4.90
Indonesia	3	3.0
Others	14	13.9
Geographical Location		
Big City	58	57.4
Small City	30	29.7
Sub-Urban	8	7.9
Rural	5	5.0
Social Media Usage Frequency		
Never	5	5.0
Rarely (1-2 times per month)	4	4.0
Sometimes (1-2 times per week)	12	11.9
Often (1-2 times per day)	25	24.8
Very Often (Multiple times per day)	55	54.5
Time Spent on Social Media (Daily)		
Less than 30 minutes	3	3.0
30 minutes to 1 hour	13	12.9
1-2 hours	19	18.8
2-4 hours	27	26.7
More than 4 hours	39	38.6
Level of Engagement with Social Media		
Not at all engaged	7	6.9
Slightly engaged	21	20.8
Moderately engaged	25	24.8
Very engaged	23	22.8
Extremely engaged	25	24.8

Note. $N = 150$

Regarding gender distribution, the sample consisted of 40.6% males ($n = 41$) and 59.4% females ($n = 60$). In terms of age, the largest group of participants was aged 17–21 years (45.5%, $n = 46$), followed by those aged 22–25 years (34.7%, $n = 35$), 26–29 years (8.9%, $n = 9$), 30–32 years (5.9%, $n = 6$), and 33–35 years (5.0%, $n = 5$). Participants' highest educational attainment varied, with 10.9% ($n = 11$) holding a high school diploma or equivalent, 33.7% ($n = 34$) having completed some college or vocational training, 36.6% ($n = 37$) earning a bachelor's degree, 13.9% ($n = 14$) possessing a master's degree, and 5.0% ($n = 5$) having a doctorate or professional degree. Moreover, employment status revealed that 65.3% ($n = 66$) of the participants were students, 8.9% ($n = 9$) were self-employed, gig workers, or part-timers, 14.9% ($n = 15$) were employed, 9.9% ($n = 10$) were entrepreneurs, and 1.0% ($n = 1$) were unemployed.

Most participants ($n = 59$, 58.4%) were from China, with Malaysia accounting for 14 participants (13.9%). Similarly, participants from Japan and Korea comprised 6 (5.9%) and 5 (4.9%) of the sample, respectively. A smaller proportion of participants were from Indonesia ($n = 3$, 3.0%), while the "Others" category, representing a diverse mix of nationalities, also included 14 participants (13.9%). Geographical location analysis showed that 57.4% ($n = 58$) lived in big cities, 29.7% ($n = 30$) in small cities, 7.9% ($n = 8$) in suburban areas, and 5.0% ($n = 5$) in rural areas.

Social media usage frequency revealed that 54.5% ($n = 55$) used social media very often (multiple times per day), 24.8% ($n = 25$) used it often (1–2 times per day), 11.9% ($n = 12$) used it sometimes (1–2 times per week), 4.0% ($n = 4$) used it rarely (1–2 times per month), and 5.0% ($n = 5$) reported never using it. Regarding time spent on social media daily, 38.6% ($n = 39$) spent more than 4 hours, 26.7% ($n = 27$) spent 2–4 hours, 18.8% ($n = 19$) spent 1–2 hours, 12.9% ($n = 13$) spent 30 minutes to 1 hour, and 3.0% ($n = 3$) spent less than 30 minutes. Finally, participants' level of engagement with social media was reported as 24.8% ($n = 25$) being extremely engaged, 22.8% ($n = 23$) very engaged, 24.8% ($n = 25$) moderately engaged, 20.8% ($n = 21$) slightly engaged, and 6.9% ($n = 7$) not engaged at all.

The platforms commonly used by the participants were also investigated. Table 2 shows that TikTok was the most frequently used platform, with 65 participants (64.4%) reporting its use, followed by WeChat (52.5%) and YouTube (47.5%). Instagram also garnered significant usage, with 45 participants (44.6%) indicating its use. Facebook, Bilibili, and Twitter (X) were used by an equal number of participants, with each platform being selected by 33 participants (32.7%). WeiBo accounted for 27 participants (26.7%), while less frequently used platforms included WhatsApp and Redbook, each with only 2 participants (2.0%).

Table 2

Social Media Platforms Used by Participants

Platform	<i>n</i>	%
Facebook	33	32.7
WeChat	53	52.5
Bilibili	33	32.7
Instagram	45	44.6
TikTok	65	64.4
Youtube	48	47.5
WeiBo	27	26.7
Twitter (X)	33	36.7
Whatsapp	2	2.0
Redbook	2	2.0

T-Test Analysis

An independent samples *t* test was used to compare the questionnaire scores of Perceived Informativeness, Attitude, and Opinion Leaders between males ($n = 41$) and females ($n = 60$). First, the normality of data was checked. The statistics in Table 3 demonstrate that the skewness and kurtosis values for all variables fall within the range of ± 1.96 (Kim, 2013), suggesting that the data were generally normally distributed. This confirms that the assumption of normality was not violated for the test.

Table 3

Descriptive Statistics of Perceived Informativeness, Attitude, and Opinion Leaders

Variable	Gender	Mean	Std. Deviation	Skewness	Kurtosis
Perceived Informativeness	Male	3.366	.672	.050	1.382
Attitude		3.328	.564	.094	1.891
Opinion Leaders		3.228	.597	1.009	1.214
Perceived Informativeness	Female	3.400	.670	-.279	.642
Attitude		3.360	.640	.011	-.354
Opinion Leaders		3.397	.760	-.142	.018

Further, Table 4 demonstrates that Levene's test was non-significant ($p > .05$), thus equal variances can be assumed. Regarding Perceived Informativeness, the t test was not statistically significant, though the male group ($M = 3.37$, $SD = .67$) reported a mean that was .03 lower, 95% CI [.30, .24], than the female group ($M = 3.40$, $SD = .67$), $t(99) = -.25$, $p = .802$, two-tailed, $d = .67$. Likewise, the t test for Attitude was also not statistically significant for the male group ($M = 3.33$, $SD = .56$) and female group ($M = 3.36$, $SD = .64$), 95% CI [-.28, .21], $t(99) = -.26$, $p = .796$, two-tailed, $d = .61$. Equally, no statistical differences were found between the male group ($M = 3.23$, $SD = .60$) and female group ($M = 3.40$, $SD = .76$) for Opinion Leaders, 95% CI [-.45, .11], $t(99) = -1.19$, $p = .235$, two-tailed, $d = .70$.

Table 4

Statistics of Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of Difference	
								Lower	Upper
PI	Equal variances assumed	.050	.824	-.251	99	.802	-.034	0.304	.236
	Equal variances not assumed			-.251	85.942	.802	-.034	-.305	.236
Attitude	Equal variances assumed	1.973	.163	-.259	99	.796	-.032	-.277	.213
	Equal variances not assumed			-.265	92.754	.792	-.032	-.272	.208
Opinion Leaders	Equal variances assumed	2.564	.113	-1.194	99	.235	-.169	-.450	.112
	Equal variances not assumed			-1.249	96.977	.215	-.169	-.438	.010

Note. PI refers to Perceived Informativeness.

ANOVA Analysis

A one-way between-groups analysis of variance (ANOVA) was conducted to compare the means of Perceived Persuasiveness and Perceived Simplification of Politics among groups with varying social media usage frequency: Never ($n = 5$), Rarely (1–2 times per month) ($n = 4$), Sometimes (1–2 times per week) ($n = 12$), Often (1–2 times per day) ($n = 25$), and Very Often (multiple times per day) ($n = 55$). The skewness and kurtosis values were examined first, as shown in Table 5. These values for both variables fell within the acceptable range of ± 1.96 for nearly all groups (Kim, 2013), confirming that the assumption of normality was not violated. Although the kurtosis value for the Never group in the variable Perceived Persuasiveness was an exception, the Q-Q plot in Figure 1 suggests that the data can be approximately considered normally distributed.

Table 5

Descriptive Statistics of Perceived Persuasiveness and Simplification of Politics

Variable	Social Media Usage Frequency	Mean	Std. Deviation	Skewness	Kurtosis
Perceived Persuasiveness	Never	2.960	.899	-.608	-2.548
	Rarely (1-2 times per month)	3.300	1.160	.737	-1.048
	Sometimes (1-2 times per week)	3.233	.525	.835	-.732
	Often (1-2 times per day)	3.104	.600	-.016	-.283
	Very Often (multiple times per day)	3.525	.642	.298	-.173
Perceived Simplification of Politics	Never	2.450	1.095	.194	.890
	Rarely (1-2 times per month)	2.813	.774	-1.138	.758
	Sometimes (1-2 times per week)	3.146	.829	-.260	.358
	Often (1-2 times per day)	3.030	.682	-.016	-.807
	Very Often (Multiple times per day)	3.491	.660	.637	.574

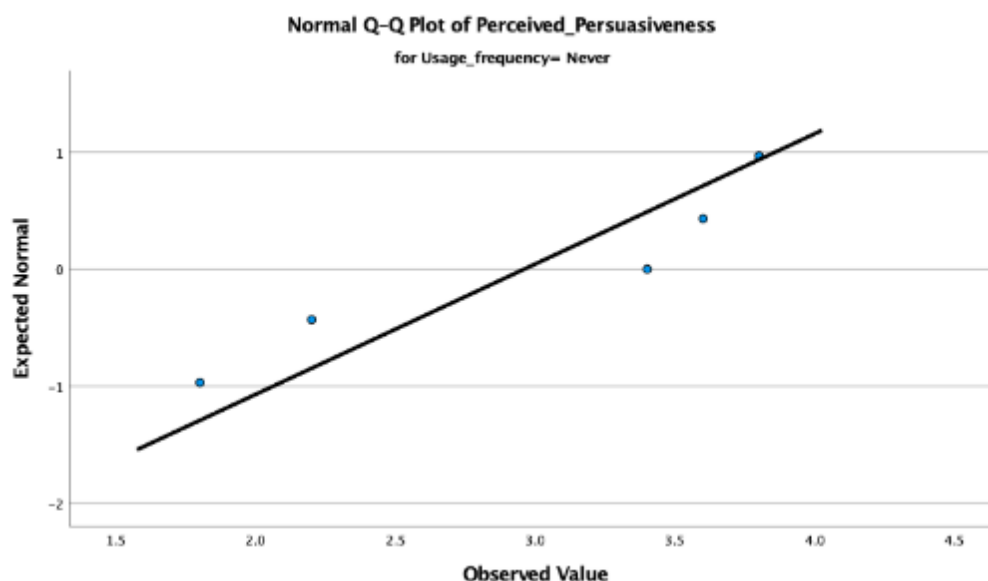


Figure 1 Q-Q Plot of Perceived Persuasiveness for Never Group

In addition to the normality assumption, Levene's statistic in Table 6 was non-significant for both variables: $F(4, 96) = 1.98, p = .104$ for Perceived Persuasiveness, and $F(4, 96) = .50, p = .739$ for Perceived Simplification of Politics. Thus, the assumption of homogeneity of variance was not violated.

Table 6

Tests of Homogeneity of Variances

Variable	Levene Statistic	df1	df2	Sig.
Perceived Persuasiveness	1.979	4	96	.104
Perceived Simplification of Politics	.495	4	96	.739

Table 7 shows that the ANOVA was not statistically significant for Perceived Persuasiveness, indicating that this variable was not influenced by the frequency of social media use, $F(4, 96) = 2.40, p = .055, \eta^2 = .09$. However, the ANOVA for Perceived Simplification of Politics was statistically significant, suggesting that it was influenced by the frequency of social media usage, $F(4, 96) = 4.18, p = .004, \eta^2 = .15$.

Table 7

ANOVA Statistics

Variable		Sum of Squares	df	Mean Square	F	Sig.
Perceived Persuasiveness	Between Groups	4.122	4	1.031	2.401	.055
	Within Groups	41.198	96	.429		
	Total	45.320	100			
Perceived Simplification of Politics	Between Groups	8.492	4	2.123	4.175	.004
	Within Groups	48.815	96	.508		
	Total	57.307	100			

Post hoc analysis in Table 8 confirms that, on the one hand, no statistically significant differences were found among the five groups with different social media usage frequencies

($p > .05$) for Perceived Persuasiveness. On the other hand, for Perceived Simplification of Politics, post hoc analyses with Tukey's HSD (using an α of .05) suggests that the Never group ($M = 2.45$, $SD = 1.10$) had a significantly lower score than the Very Often group ($M = 3.49$, $SD = .66$), $p = .019$, $d = .64$. For the other groups, no statistical differences were found ($p > .05$).

Table 8

Multiple Comparisons for Perceived Simplification of Politics

Dependent Variable	(I) Usage Frequency	(J) Usage Frequency	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Perceived Persuasiveness	Never	Rarely (1-2 times per month)	-.340	.439	.938	-1.562	.882
		Sometimes (1-2 times per week)	-.273	.349	.935	-1.243	.696
		Often (1-2 times per day)	-.144	.321	.991	-1.036	.748
		Very Often (multiple times per day)	-.565	.306	.354	-1.415	.286
	Rarely (1-2 times per month)	Sometimes (1-2 times per week)	.067	.378	1.000	-.985	1.118
		Often (1-2 times per day)	.196	.353	.981	-.785	1.177
		Very Often (multiple times per day)	-.225	.339	.964	-1.168	.719
	Sometimes (1-2 times per week)	Often (1-2 times per day)	.129	.230	.980	-.510	.769
		Very Often (multiple times per day)	-.291	.209	.632	-.872	.289
	Often (1-2 times per day)	Very Often (Multiple times per day)	-.421	.158	.067	-.860	.019
Perceived Simplification of Politics	Never	Rarely (1-2 times per month)	-.363	.478	.942	-1.693	.968
		Sometimes (1-2 times per week)	-.696	.380	.361	-1.751	.360
		Often (1-2 times per day)	-.580	.349	.463	-1.551	.391
		Very Often (multiple times per day)	-1.041	.333	.019*	-1.967	-.115

Rarely (1-2 times per month)	(1-2 times per month)	Sometimes (1-2 times per week)	-.333	.412	.927	-1.478	.811
		Often (1-2 times per day)	-.218	.384	.980	-1.285	.850
		Very Often (multiple times per day)	-.678	.369	.359	-1.705	.348
Sometimes (1-2 times per week)	(1-2 times per week)	Often (1-2 times per day)	.116	.250	.990	-.580	.812
		Very Often (multiple times per day)	-.345	.227	.553	-.977	.287
Often (1-2 times per day)	(1-2 times per day)	Very Often (Multiple times per day)	.461	.172	.065	-.017	.939

* The mean difference is significant at the .05 level.

Regression Analysis

Before conducting the regression analysis, the assumptions were checked. The skewness and kurtosis values for the variables were examined and found to be within the acceptable range of ± 1.96 (Kim, 2013), as shown in Table 2, which confirmed that the assumption of normality was not violated. However, the boxplots in Figure 2 indicate the presence of outliers in the data, violating the assumption of no outliers. While the existence of outliers can lead to poor model fit and potentially impact the accuracy of predictions for the majority of the data (Gunst & Mason, 2016), regression analysis was still conducted for the purpose of the assignment.

Table 9

Descriptive Statistics of Perceived Informativeness, Simplification of Politics, Persuasiveness, and Attitude

Variable	Mean	Std. Deviation	Skewness	Kurtosis
Perceived Informativeness	3.386	.668	-.144	.809
Perceived Simplification of Politics	3.257	.757	-.058	.592
Perceived Persuasiveness	3.349	.673	.179	-.098
Attitude	3.347	.608	.047	.254

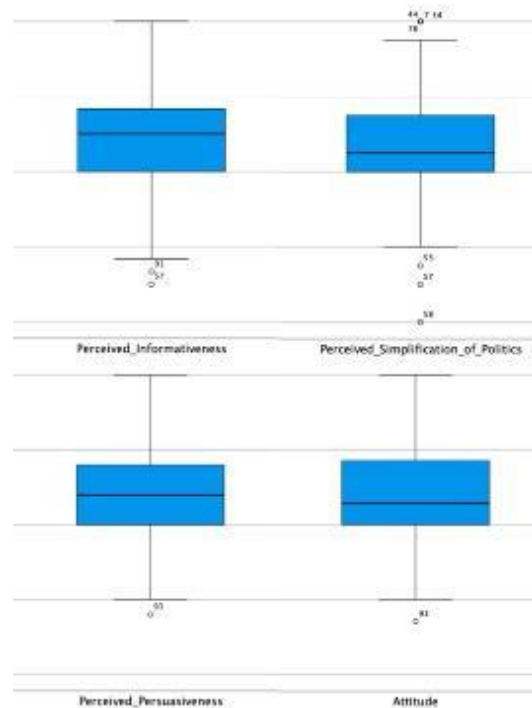


Figure 2 Boxplots of Variables

Moreover, the multicollinearity of the data was checked. The statistics in Table 10 show that the tolerances of the predictor variables, namely Perceived Informativeness, Perceived Simplification of Politics, and Perceived Persuasiveness were above .01, and their VIFs were below 5 (Gunst & Mason, 2016). This suggests that multicollinearity was not a concern for the analysis. Moreover, the maximum Mahalanobis Distance in the study was 18.88, larger than the critical chi-square (χ^2) value, namely 16.27 for $df = 3$ at $\alpha = .001$ (Gunst & Mason, 2016). This indicates the presence of one or more multivariate outliers. Lastly, the scatterplot in Figure 3 was used to assess the assumptions of normality, linearity and homoscedasticity of residuals. These assumptions were met due to the absence of any clear patterns in the spread of points.

Table 10

Collinearity Statistics

Variable	Tolerance	VIF
Perceived Informativeness	.373	2.683
Perceived Simplification of Politics	.574	1.743
Perceived Persuasiveness	.451	2.218

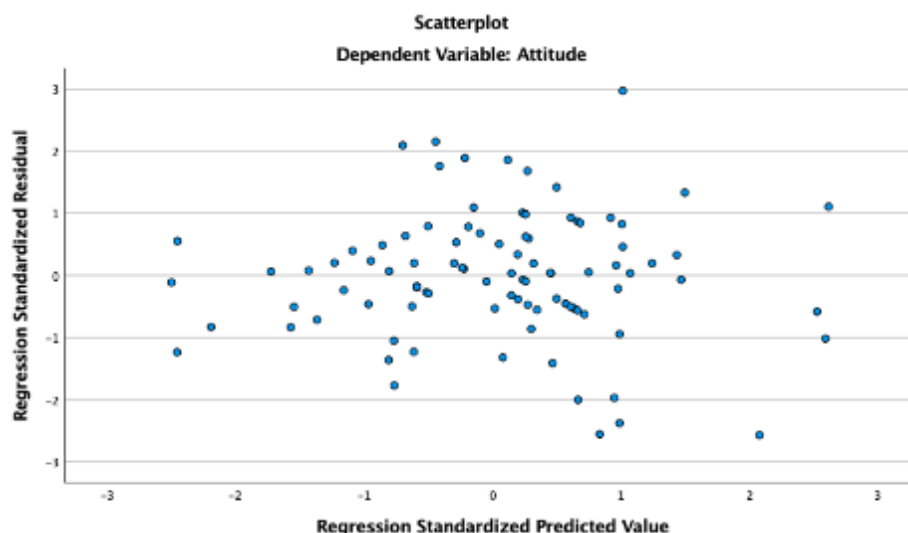


Figure 3 Scatterplot of Standardized Residuals

In combination, as shown in Table 11 and Table 12, Perceived Informativeness, Perceived Simplification of Politics, and Perceived Persuasiveness accounted for a significant 58.2% of the variability of Attitude, $R^2 = .58$, adjusted $R^2 = .57$, $F(3, 97) = 44.98$, $p < .001$, $f^2 = 1.39$. Unstandardized (B) and standardized (β) regression coefficients and squared semi-partial correlations (sr^2) for each predictor in the regression model are reported in Table 13. Perceived Informativeness emerged as a significant predictor of the outcome variable, $B = .49$, $\beta = .55$, $p < .001$. This predictor accounted for 10.8% of the unique variance. Perceived Persuasiveness also demonstrated a significant relationship with the outcome variable, with $B = .21$, $\beta = .23$, $p = .021$, explaining 2.4% of the unique variance. In contrast, Perceived Simplification of Politics was not a significant predictor to Attitude, $B = .05$, $\beta = .06$, $p = .518$. These findings highlight that while Perceived Informativeness and Perceived Persuasiveness significantly contribute to the prediction of the outcome variable, Perceived Simplification of Politics does not show a meaningful relationship.

Table 11

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimates
1	.763	.582	.569	.399

Note. Dependent Variable: Attitude; Predictors: Perceived Informativeness, Perceived Simplification of Politics, and Perceived Persuasiveness.

Table 12

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.475	3	7.158	44.982	.000
	Residual	15.437	97	.159		
	Total	36.912	100			

Table 13

Regression Coefficients

	Unstandardized B [95% CI]	Standardized (β) Regression Coefficients	Sig.	Squared Semi-Partial Correlations (sr)	Squared Semi-Partial Correlations (sr^2)
Perceived Informativeness	.490 [.296, .684]	.549	.000	.329	.108
Perceived Simplification of Politics	.045 [-.093, .183]	.056	.518	.043	.002
Perceived Persuasiveness	.208 [.033, .383]	.230	.021	.155	.024

Conclusion*Summary of Findings*

As the initial research aim to explore disparities in perceived informativeness, attitudes, and opinion leaders between genders, the independent samples t-test showed no significant differences between male and female subjects. Despite minor changes in average scores, they weren't significant enough to suggest gender's influence on shaping perceptions of influencers' informativeness, personal views on them, or their views as opinion leaders. This implies that both genders might have similar perceptions and interactions with social media influencers regarding environmental politics, regarding these factors.

Analyzing the impact of the frequency of social media use on political perceived persuasiveness and simplification for an additional research goal, the unidirectional ANOVA showed no notable variance in perceived persuasiveness across various social media use levels. This indicates a weak correlation between influencers' knack for crafting compelling arguments and their frequency of social media usage. Notably, notable disparities were seen in how often they perceive political simplification. Subsequent examinations suggested that social media users "Very Often" scored higher in this sense of simplification than those who "Never" engage with social media, highlighting a possible connection between regular social media exposure and the belief that influencers adeptly simplify intricate political subjects.

Investigating if factors like the perceived informativeness, simplicity of politics, and persuasiveness shape the perceptions of social media influencers in the final study, a multiple regression analysis was implemented. The outcomes indicated that perceived informativeness was a principal predictor, accounting for a significant part of the attitude variance. In a related vein, the perceived persuasiveness had a notable but not as strong impact on attitudes. Conversely, the notion of simplified politics had no substantial connection with attitudes. This implies that the precision, pertinence, and convincingness of influencer content played a crucial role in forming public attitudes, in contrast to the minimal effect of simplified political content on these attitudes.

Limitations

The research acknowledges various constraints in understanding the impact of social media influencers on public perceptions and attitudes towards environmental politics. Its primary reliance on self-reported data may result in biases like social desirability or memory

inaccuracies. The study's participants' interaction with these influencers or their views on environmental politics might have been exaggerated or downplayed. The snowball sampling method limits the study's broader applicability. This methodology, while successful in engaging a varied participant pool, potentially overstated specific demographics or habits of use, which might alter the outcomes. Moreover, the study's cross-sectional approach offers only a momentary view of attitudes and perspectives. The study overlooks potential shifts in participant attitudes or behaviors over time, potentially shaped by changing environmental factors or shifts in social media interactions. Such shortcomings indicate areas for further enhancement in future research and recommend a cautious interpretation of the data in more context-specific situations.

Recommendations

Recognizing the constraints of this research, subsequent studies need to use longitudinal methodologies to track shifts in views and perspectives over time, thereby shedding light on how changing ecological matters and social media interactions affect public participation. For better applicability, investigators should utilize stratified or random sampling techniques to secure varied and representative participant groups, reducing the potential biases from snowball sampling. Moreover, using a hybrid technique of self-reports in surveys and behavioral or qualitative forms like interviews might lessen dependence on self-reported data and offer a more detailed insight into how participants interact with social media influencers. Following this research, various suggestions are available to amplify the influence of social media influencers in molding public views and views on environmental politics. It's imperative for social media influencers to focus on imparting lucid, current, and pertinent information, recognizing that the extent of perceived informativeness greatly forecasts their attitudes towards them. Such influencers can attain this by integrating data-driven material, using visual tools, and concentrating on topics of substantial public interest. Moreover, they need to refine their persuasive communication techniques. Although persuasiveness wasn't as influential as informativeness, it still played a notable role in shaping public perceptions. For enhancing this element, influencers could utilize strategies like storytelling, emotional outreach, and rational arguments to captivate and inspire their audience.

References

- Aarons, H. (2020). *A Practical Introduction to Survey Design: A Beginner's Guide*. Sage.
- Bennett, K., Heritage, B., & Allen, P. (2022). *SPSS Statistics: A Practical Guide* (5th ed.). Cengage Learning Australia.
- Bolton, K., & Brace, I. (2022). *Questionnaire Design: How to Plan, Structure and Write Survey Material for Effective Market Research*. Kogan Page.
- Buvár, Á., Zsila, Á., & Orosz, G. (2023). Non-green influencers promoting sustainable consumption: Dynamic norms enhance the credibility of authentic pro-environmental posts. *Frontiers in Psychology*, 14, Article 1112762. <https://doi.org/10.3389/fpsyg.2023.1112762>
- Dekoninck, H., & Schmuck, D. (2022). The Mobilizing Power of Influencers for Pro-Environmental Behavior Intentions and Political Participation. *Environmental Communication*, 16(5), 1-15. <https://doi.org/10.1080/17524032.2022.2027801>
- Gray, D. E. (2022). *Doing research in the real world* (5th ed.). Sage.
- Gunst, R. F., & Mason, R. L. (2016). *Regression analysis and its application: a data-oriented approach*. CRC Press.
- Hajri, O., & Daife, Y. (2024). The role of social media in engaging young people in environmental issues. *E3S Web of Conferences*, 477, Article 00079. <https://doi.org/10.1051/e3sconf/202447700079>
- Hund, E. (2025). *The Influencer Industry: The Quest for Authenticity on Social Media*. Princeton University Press.
- Jalali, S. S., & Khalid, H. B. (2021). The Influence of Instagram Influencers' Activity on Green Consumption Behavior. *Business Management and Strategy*, 12(1), 78-90. <https://doi.org/10.5296/bms.v12i1.18265>
- Kim, H. Y. (2013). Statistical notes for clinical researchers: assessing normal distribution (2) using skewness and kurtosis. *Restorative Dentistry & Endodontics*, 38(1), 52-54. <https://doi.org/10.5395/rde.2013.38.1.52>
- Li, J., Chiu, D. K. W., Ho, K. K. W., & So, S. (2024). The Use of Social Media in Sustainable Green Lifestyle Adoption: Social Media Influencers and Value Co-Creation. *Sustainability*, 16(3), Article 1133. <https://doi.org/10.3390/su16031133>
- Nazir, M., & Wani, T. A. (2024). Role of social media influencer toward environmental involvement and green buying behavior. *Business Strategy & Development*, 7(2), Article e390. <https://doi.org/10.1002/bsd2.390>
- Pasikowski, S. (2024). Snowball Sampling and Its Non-Trivial Nature. *Przegląd Badań Edukacyjnych [Educational Studies Review]*, 2(43), 105-120. <https://doi.org/10.12775/PBE.2023.030>
- Shahabuddin, A. (2024). Social media Influencers' credibility on Green Purchase Behavior: Evidence from Bangladesh. *International Journal of Educational Research & Social Sciences*, 5(3), 372-378. <https://doi.org/10.51601/ijersc.v5i3.827>
- Shamsi, M. S., Narula, S., & Sharma, A. (2022). Does Environmental Awareness via SNS Create Sustainable Consumption Intention among the Millennials? *Journal of Content, Community & Communication*, 15(2), 100-116. <https://doi.org/10.31620/JCCC.06.22/08>
- Singh, M. K. (2023). *Research methodology and scientific approach*. Academic Guru Publishing.
- Sun, Y., & Xing, J. (2022). The Impact of Social Media Information Sharing on the Green Purchase Intention among Generation Z. *Sustainability*, 14(11), Article 6879. <https://doi.org/10.3390/su14116879>

- Suryaputra, R., Daryanti, S., & Setyowardhani, H. (2024). The role of social media in promoting sustainable green lifestyles: Influencers and value co-creation with Gen Z in Indonesia. *Journal of Entrepreneurial Economic*, 1(1), 45-62. <https://doi.org/10.61511/jane.v1i1.2024.1036>
- Ter-Mkrtchyan, A., & Taylor, M. A. (2023). An Empirical Mapping of Environmental Protection and Conservation Nonprofit Discourse on Social Media. *Nonprofit and Voluntary Sector Quarterly*, 53(4), 898-925. <https://doi.org/10.1177/08997640231202459>
- Vilkaitė-Vaitonė, N. (2024). From Likes to Sustainability: How Social Media Influencers Are Changing the Way We Consume. *Sustainability*, 16(4), Article 1393. <https://doi.org/10.3390/su16041393>
- Wu, C., & Thompson, M. E. (2021). *Sampling theory and practice*. Springer.
- Yaşa, H., & Birsen, H. (2024). Do Influencers View Themselves as Opinion Leaders? An Examination of Influencers and Social Media Content. *Vivat Academia*, 157, 1-28. <https://doi.org/10.15178/va.2024.157.e1545>
- Yıldırım, S. (2021). Do green women influencers spur sustainable consumption patterns? Descriptive evidences from social media influencers. *Ecofeminism and Climate Change*, 2(4), 198-210. <https://doi.org/10.1108/EFCC-02-2021-0003>
- Xie, P., Zhang, Y., Chen, R., Lin, Z., & Lu, N. (2024). Social media's impact on environmental awareness: a marginal treatment effect analysis of WeChat usage in China. *BMC Public Health*, 24, Article 3237. <https://doi.org/10.1186/s12889-024-20721-4>