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Research Article

Representations of sustainability by Instagram influencers: An examination in the context of digital opinion leadership

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ABSTRACT

The destruction of nature over the past century, rapid urbanization, population growth, and the pollution that accompanies these processes, together with climate change and disasters, indicate that the world is increasingly facing serious threats. In this context, sustainability has also emerged as a social issue. Social media has become an arena where sustainability-related content circulates. This study aims to examine through which thematic frameworks sustainability discourse is presented in sustainability-themed posts shared by influencers who actively use Instagram in Turkey. The research was conducted using a qualitative content analysis approach based on social media content. A total of 2,155 content units (posts and reels) shared by 15 Instagram influencers were analyzed. The analysis identified three main themes: presentation of sustainable lifestyle, digital representation of sustainability discourse, and follower interaction and feedback. The findings indicate that sustainability discourse was predominantly framed through individual lifestyle practices such as reuse, recycling, zero-waste living, and responsible consumption. By contrast, structural environmental issues appeared less frequently within the analyzed content. Follower interactions were largely supportive, while critical engagement remained limited. The findings further suggest that these communication practices display characteristics associated with discussions of digital opinion leadership in the literature. However, the study does not directly measure influence, persuasion, or behavioral change among followers. Unlike the consumption-oriented approaches that dominate much of the influencer literature, this study examines how sustainability is thematically represented in digital content, using Turkey as its empirical context.

Keywords: sustainability, influencer, sustainability discourse, Instagram, qualitative content analysis

INTRODUCTION

With the Industrial Revolution, the impact of human activities on nature has reached an irreversible level. In the literature, this process has brought to the fore an anthropogenic problem often described as the "sixth mass extinction" (Tan Gülcan, 2021). In response to these threats, countries have signed various climate agreements aimed at preventing further damage. Turkey ratified the Paris Climate Agreement in 2021. Under this agreement, countries committed themselves to keeping the global average temperature rise below 2 °C compared to pre-industrial levels and to reducing greenhouse gas emissions. If no effective measures are taken, the increase in global average temperature is expected to exceed 4.8 °C. Today, the signs of this trend are already visible in rising ocean levels caused by melting glaciers, as well as in storms, hurricanes, and floods (Ünsal, 2024). At the same time, increasing air pollution, drought, water scarcity, deforestation, and the accumulation of heavy metals in soil and water have pushed societies to protect the environment, use resources more rationally, and move toward more sustainable ways of living. This situation has made the need for social awareness about environmental protection unavoidable. Yet sustainability is often confined to an environmental discourse, even though the concept also points to broader social relations and practices.

Although governments and civil society organizations take various measures to address environmental problems, the spread of environmental awareness among wider publics largely occurs through education and mass communication channels. In encouraging sustainability and moving from discourse to action, opinion leaders can function as important role models. In this context, influencers resemble the opinion leaders described in the traditional two-step flow model, but they share sustainability messages through a multi-step flow of communication. The literature notes that influencers contribute to the circulation of content that raises awareness about issues such as zero waste, reducing food waste, and decreasing plastic consumption. Although studies addressing this role of influencers exist, most of them have approached the issue primarily within the framework of marketing communication.

Existing studies have largely examined the impact of social media influencers on sustainability within the framework of green consumption and purchase intention (Beulah & Chitrakala, 2024; Jalali & Khalid, 2021; Vilkaite-Vaitone, 2024). These studies suggest that influencers can increase environmentally friendly consumption intentions through perceived credibility, authenticity, and interaction (Casaló et al., 2020; Kumar et al., 2023). However, such approaches tend to treat sustainability as a market-oriented practice and portray influencers primarily as persuasive actors (Abidin & Ots, 2015; Khamis et al., 2016).

By contrast, a limited number of qualitative studies examine influencers in terms of digital environmental activism and lifestyle narratives, revealing how sustainability is interpreted and made meaningful through everyday practices (Chwialkowska, 2019; San Cornelio et al., 2024). Nevertheless, the question of how influencers frame sustainability as an ethical stance independent of consumption promotion remains relatively underexplored in the literature (Castillo-Abdul et al., 2024; Stiefvatter, 2022). Studies conducted in the Turkish context also tend to pay limited attention to how sustainability awareness is constructed as a communicative process (Şener & Öymen, 2023; Tavman & Doğan, 2025).

This study departs from outcome-oriented approaches that treat social media influencers primarily as actors who encourage environmentally friendly consumption behavior. Instead, it focuses on how sustainability-themed content becomes visible through everyday practices within digital interaction processes. For this reason, influencer content is not approached as a set of directly persuasive messages. The central concern is how representations of sustainability are constructed within social media environments and through which frameworks they circulate. The study also considers these representations in relation to discussions of digital opinion leadership in the literature. Based on this perspective, the research seeks to answer the following questions:

1. Through which themes, discourses, and sustainable lifestyle practices do influencers who produce sustainability-related content on Instagram communicate issues related to the environment and sustainability?
2. How are these contents and practices presented within a framework of environmental discourse, and how do follower interactions reflect characteristics commonly associated with discussions of digital opinion leadership?

Sustainability: A Search for Solutions or a Legitimizing Discourse?

The exploitation of natural resources and uncontrolled consumption have disrupted ecological balance, bringing debates on environmental protection and sustainability to the forefront. The concept of sustainability was first articulated in the United Nations report our common future in 1987, where sustainable development was defined as *"meeting the needs and aspirations of the present without compromising the ability of future generations to meet their own needs"* (World Commission on Environment and Development, 1987). Sustainability has three interrelated dimensions: social, economic, and environmental (Küçükoğlu, 2014). In other words, the concept refers not only to environmental protection but also to issues such as poverty reduction, fair income distribution, and equality. Sustainability becomes crucial in this context because while human needs continue to grow, natural resources are being depleted at a rapid pace (Şen et al., 2018). Mass production and consumption damage not only the environment but also social and economic structures, making the search for solutions and preventive measures increasingly necessary (Engindeniz & Şener, 2023).

But does sustainability truly offer concrete solutions to structural problems that have accumulated over decades, or does it function as a legitimizing discourse that only appears to address them? The literature

presents two main perspectives on this question. The first argues that through the seductive strategies of producers and advertisers, individuals are encouraged to consume beyond their actual needs. From this perspective, sustainability can be interpreted as a legitimizing discourse introduced by capitalism and large corporations in order to maintain their own continuity. Examples include the marketing of products that claim to consume less energy or the sale of organic and ecological products (such as lactose-free or gluten-free items) at higher prices (Boschele, 2020). Large corporations and even governments may produce arguments under the banner of sustainability that allow them to profit from ecological problems themselves. Capital, after all, tends to pursue continuous growth and often avoids investing in renewable energy sources when they are not expected to generate sufficient profit (Turgut, 2014).

The second perspective suggests that the major problems concerning the planet and the future of human life such as climate change, global warming, drought, and the loss of biodiversity can only be addressed through measures taken on a global scale (Aydın & Tufan, 2018). Despite criticisms that the concept may conceal implicit intentions (Şen et al., 2018), sustainability can still play a role in raising awareness at the individual level and in making environmental problems more visible, even if its capacity to generate deep structural transformation remains limited.

Sustainability appears not only as a product of discourse but also as a phenomenon that circulates within the social sphere through communication processes. Which actors become prominent in this circulation and how sustainability discourse spreads can therefore be examined in relation to opinion leadership and the production of discourse. Sustainability communication refers to an approach designed to manage relationships among stakeholders in order to support awareness of economic, environmental, and social sustainability or, in some cases, to foster changes in attitudes (Engindeniz & Şener, 2023). This perspective focuses on how sustainability-related messages are communicated to the public. In this process, the role of mass media particularly social media today in raising awareness cannot be overlooked (Oyur, 2019).

The circulation of sustainability discourse on social media platforms cannot be explained solely by the discursive preferences of content creators. The content formats and interaction architecture offered by digital media technologies influence how environmental messages are produced, the narrative forms through which they are presented, and how they are interpreted by users. In particular, short video-based content technologies and communication environments built on user interaction create a media setting that facilitates the representation of sustainability-themed content through everyday life practices. This situation requires environmental communication to be understood not simply as a linear process based on message transmission, but as a communicative practice reconstructed within the technical infrastructure and interactive features of digital platforms. Accordingly, sustainability communication can be discussed as a process that is shaped, at least in part, by the technical architecture of social media platforms and digital media technologies (Dekoninck et al., 2023; Rozaq et al., 2025). However, the specific influence of these platform mechanisms falls beyond the empirical scope of the present study.

The Diffusion of Sustainability Discourse: Multi-Step Flow and Digital Opinion Leadership

The first assumptions regarding the influence of mass media on individuals were proposed by Paul Lazarsfeld and Elihu Katz. According to the two-step flow theory they developed, messages from the media do not reach individuals directly or equally; instead, these messages circulate through opinion leaders who are more exposed to media content than others. Opinion leaders then transmit these messages to broader audiences through everyday interactions. The communication process was thus conceptualized as a flow extending from the media to opinion leaders and eventually to the public (Özçetin, 2019). The Decatur study, in particular, demonstrated that in everyday decisions such as what to buy or which film to watch individuals are influenced less by the media itself and more by interpersonal communication and opinion leaders (Katz, 1957).

Today, everyday decisions are still largely shaped through interpersonal communication. For example, when an influencer shares sustainability-related content, followers discuss and interpret that content in the comments section. In this process, interaction between influencers and followers may create communication patterns that appear more horizontal than the traditional one-way communication structures associated with mass media. The two-step flow model was developed at a time when communication in traditional mass media operated through a vertical and one-way structure. In today's media ecosystem, however,

communication unfolds through multi-step and interactive processes. Individuals no longer remain merely in the position of receivers; they also interpret, reshape, and circulate content. For this reason, the concept of opinion leadership needs to be reconsidered within the dynamics of this contemporary media environment.

The concept of the public sphere was originally grounded in a rational space where citizens engaged in equal discussion and where public reason could emerge (Habermas, 2013). With the rise of new media, however, this sphere has become increasingly personalized and fragmented. In the information society, networks have produced new forms of organization across nearly every aspect of social life (Kara, 2013). Virtual public spheres are formed entirely through users' contributions and are continuously reshaped through interaction (Papacharissi, 2002). As in earlier discussions of the two-step flow, influencers and content creators are frequently discussed in the literature as actors who may occupy positions associated with opinion leadership in digital environments. Consequently, today's highly fragmented public sphere has evolved into a space where not only rational debate but also emotions, meanings, and opinions are shared and circulated.

Today, social media algorithms influence the formation of public opinion by determining which topics and comments become more visible in the public sphere (Prodnik, 2025). Yet even though algorithms shape which discourses gain prominence, sustainability-related content continues to circulate through complex interaction processes that can be discussed in relation to debates on digital opinion leadership.

Influencers as Digital Opinion Leaders and the Construction of Sustainability Discourse

On social media platforms, sustainability-related issues are gaining increasing visibility, and social media offers a form of interaction that differs from face-to-face communication in terms of promoting sustainability (Apaydın, 2025). The term *influencer* literally means "one who influences." However, this influence may be oriented toward consumption, or it may focus on sustainability and environmental concerns (Şenel & Karaağaoğlu, 2022). For this reason, definitions of the influencer concept vary depending on the direction and context of influence.

According to one perspective, an influencer is defined *as "a third party who significantly shapes the consumer's purchasing decisions and assumes responsibility for that influence"* (Engindeniz & Şener, 2023, p. 131). Another perspective describes influencers as *"inspiring individuals who are concerned with social and political issues, seek to make the world a better place, and share content about topics such as sustainable fashion, veganism, eco-friendly travel recommendations, and reducing plastic use."* This latter group is more commonly referred to in the literature as *sinnfluencers* (Engindeniz & Şener, 2023, p. 135). Sinnfluencers are typically positioned as ethical lifestyle guides who encourage reduced consumption and reuse, and who do not prioritize financial gain (Stiefvatter, 2022).

The content production and sharing practices of social media influencers are often discussed as a form of opinion leadership that connects with the attitudes of broader audiences (Jalali & Khalid, 2021). This dynamic creates a favorable environment for the circulation of sustainability discourse on social media (Chwialkowska, 2019; Şenel & Karaağaoğlu, 2022). Studies indicate that trust in social media influencers can shape users' intentions to share environmental content. Because social media functions as an important communication channel for the circulation of environmental information, it also contributes to the wider diffusion of sustainability-related content (Jiao et al., 2025). At this point, the way influencers construct and perform their role becomes an important question.

Influencers tend to reframe sustainability through visual narratives and representations of everyday practices, allowing these themes to circulate within social media environments (Beulah & Chitrakala, 2024). Within this framework, influencers do not usually present sustainability as a prescriptive call to action. Instead, they make it visible as something already practiced within everyday life, transmitting it as a lifestyle. Sustainability-related issues are reinterpreted through qualities such as sincerity, accessibility, credibility, sympathy, confidence, attractiveness, and authenticity within the routines of daily life (Stiefvatter, 2022). Through social media and an atmosphere of perceived intimacy, influencers may appear almost like friends to their followers (Şenel & Karaağaoğlu, 2022). The parasocial relationship that develops between followers and influencers can open the door to trust (Kapoor et al., 2023). In this way, influencers can easily convey the message: "I am just like you." Through interactions with followers comments and responses in particular sustainability discourse continues to circulate within the platform (Stiefvatter, 2022, p. 14-15). Within this

multi-step flow, influencers may occupy communicative positions that share certain characteristics commonly associated with digital opinion leadership. In this context, communication tends to be presented through interaction, participation, and perceived proximity rather than through direct instruction or authority.

METHODOLOGY

Research Objective

The aim of this study is to examine the thematic frameworks and everyday life practices through which influencers who produce sustainability-related content on Instagram in Turkey present these contents. The study also seeks to analyze how these contents are framed in terms of awareness within the context of follower interactions and how these communication practices can be discussed in relation to the concept of digital opinion leadership.

Research Method

This study was designed within the framework of a qualitative research approach. The dataset consists of posts and reels videos shared on the Instagram platform. The unit of analysis was defined as content, while post captions, hashtags, and user comments were treated as contextual data during the analysis process. The data were analyzed through an open coding method, and the coding process was conducted using MAXQDA 2024 software.

Research Population

The population of the study consists of individual influencers in Turkey who produce sustainability-themed content through publicly accessible Instagram accounts.

Research Sample

In this study, purposive sampling was employed, selecting units that could provide the most relevant data for the research problem based on specific criteria (Baltacı, 2019). Accordingly, the sample was determined from individual influencer accounts for which sustainability constitutes a central element of the account identity, where sustainability-related content is produced regularly, and which have been actively posting within the last six months. In this study, sustainability-themed content refers to posts produced around themes such as environmental awareness, ethical consumption, zero-waste living, recycling, sustainable fashion, and the climate crisis.

Content on Instagram was screened using the hashtags #sürdürülebilirlik, #sürdürülebiliryasam, #sürdürülebilirtüketim, #eko, #çevredostu and #greenliving (#sustainability, #sustainableliving, #sustainableconsumption, #eco, #ecofriendly, #greenliving) and individual accounts that regularly used these hashtags were listed. During the preliminary screening process, 66 accounts were identified through these hashtags. After evaluating them according to the frequency of sustainability-related content production, content density, and thematic consistency, 15 accounts were included in the sample. The listed accounts were assessed based on criteria such as the frequency of sustainability-themed content production, content intensity, engagement level per post, and thematic consistency. Accounts that met these criteria and had been posted actively within the last six months were included in the sample. The use of purposive sampling was considered appropriate because the study sought to examine a specific form of sustainability communication rather than to achieve statistical representativeness. To reduce potential selection bias, all identified accounts were evaluated according to the same inclusion and exclusion criteria, and the selection process was documented systematically throughout the sampling stage.

As a result of the filtering process, 15 influencer accounts that met the specified criteria were included in the sample. The number of followers of these accounts ranges from 10,000 to over 200,000. Accounts with fewer than 10,000 followers were excluded because their limited visibility could make it difficult to observe the thematic continuity of sustainability-related content (Engindeniz & Şener, 2023). Mega accounts with more than one million followers often operate within a framework of professionalized content production and extensive brand collaborations. Considering that this may lead to a more institutionalized form of discourse, the study focused instead on individual accounts within the micro- and mid-level influencer categories.

Table 1. Distribution of coded segments across sampled Instagram accounts

Account no	Instagram account	Number of coded segments
1	@baboonnatural	62
2	@neslisanfazlagic	40
3	@turkisminimalizm	70
4	@surdurulebilir_bir_yasam	174
5	@healthyfluencer	37
6	@yelizutku	24
7	@atiksizminimalist	90
8	@meldatuna	104
9	@cobirebir	39
10	@akademicevreas	28
11	@surdurulebilirlikakademisi	34
12	@dunya_organizasyon_egitim	58
13	@iyi_pamuk	38
14	@dijitaltercume	35
15	@surdurulebiliryasam	15
Total		848

When determining the sample size, the principle of thematic saturation was considered. During the analysis process, it was observed that no new thematic categories emerged after a certain stage, indicating that data saturation had been reached. In addition, the sample size was evaluated in line with the "information power" approach developed by Malterud et al. (2016). Given the focused nature of the research question, the criterion-based selection of sample units, and the multilayered structure of the dataset, it was concluded that 15 accounts were sufficient to ensure analytical depth and enable meaningful discursive analysis.

Scope and Limitations

The study is limited to the Instagram platform, while other social media platforms such as YouTube, X, and TikTok were excluded from the scope. Instagram's structure, which is based on visual storytelling and user interaction, provides a suitable research environment for examining sustainability-themed content (Çepni Şener & Yılmaz, 2023; Jalali & Khalid, 2021). Corporate brand accounts and commercial business pages were also excluded from the study. The data were limited to content shared between June 10, 2025, and December 10, 2025. This time frame allowed the thematic continuity of sustainability discourse to be observed. However, it should also be considered that seasonal patterns in content production may have influenced the findings. In addition, although the theoretical framework discusses platform affordances, algorithmic visibility, and platform-driven content circulation, these mechanisms were not examined directly in the analysis. The study focuses on the discursive construction of sustainability through influencer content and follower interactions rather than on algorithmic processes. Therefore, the findings should not be interpreted as direct evidence of how Instagram's algorithm shapes visibility, engagement, or content distribution. Future research may address this limitation by combining qualitative content analysis with platform-specific metrics or network-based approaches.

Data Collection

The data source consists of posts shared by the individual Instagram influencer accounts included in the sample during the specified time period. During the data collection process, each account was examined and content related to sustainability themes was identified and included in the analysis. The contents were recorded together with information on the date of sharing, content type (post/reels), hashtags used, and level of engagement (likes and comments). Only publicly accessible user comments were included in the analysis. The sustainability-related contents included in the analysis were archived through screenshots and classified according to content type. Each piece of content was treated as a unit of analysis, while post captions and the associated user comments were considered as data linked to that unit.

To improve transparency regarding the composition of the dataset, **Table 1** presents the distribution of coded segments across the sampled Instagram accounts. The frequencies reported in **Table 1** refer to coded segments identified during the thematic analysis rather than to the total number of posts included in the

dataset. This information is provided to demonstrate the contribution of individual accounts to the overall analytical corpus.

As shown in **Table 1**, coded segments were distributed across all sampled accounts. Although some variation existed in the number of coded segments generated by individual accounts, the dataset was not dominated by a single influencer account. The highest number of coded segments identified within a single account was 174, whereas coded segments were distributed across all remaining accounts in the sample. This distribution suggests that the thematic findings emerged from patterns observed across the dataset rather than from a small number of highly active accounts. Nevertheless, one account contributed approximately 20.5% of the coded segments, indicating a degree of variation in account-level contributions. Although this concentration should be acknowledged, the thematic patterns identified in the analysis were observed across multiple accounts rather than being limited to a single source. Therefore, the findings should be interpreted with awareness of this variation in contribution across the sampled accounts.

Data Analysis

During the analysis process, post captions and user comments associated with the content were evaluated together. Recurrent concepts, discursive patterns, and representations were identified through open coding. The codes obtained were grouped according to similar content to form thematic clusters, and a hierarchical coding system was subsequently developed by establishing relationships between main themes and sub-codes. As a result of this process, the data were organized under three main themes: presentation of sustainable lifestyle, digital representation of sustainability discourse, and follower interaction and feedback. The themes were interpreted not only according to the frequency of content but also by considering their discursive functions and modes of meaning production. During the analysis, a total of 2,155 content units (posts and reels) were examined. Within these materials, sections directly related to sustainability discourse were coded. The coding process yielded 848 coded data segments. These segments were initially organized under 76 preliminary codes and subsequently grouped into three main themes based on similarities in content.

Validity and Reliability

In order to ensure validity and reliability, the analysis process in this study was conducted in a systematic and traceable manner, and the coding and theme development stages were reported in detail (Arslan, 2022; Tutar, 2022). The coding process was carried out in two stages. After the initial coding, the dataset was re-examined, overlapping codes were merged, and conceptual boundaries were clarified. The codes were compared with the theoretical framework to ensure that interpretations remained grounded in the data. The coding system and subsequent revisions were documented to maintain transparency and traceability throughout the process. The dataset was initially coded by the researcher through repeated readings of the collected content. During the coding process, codes were continuously reviewed and refined to improve conceptual consistency. Similar codes were merged where appropriate, while overlapping or ambiguous codes were reconsidered and reorganized. The emerging coding framework and thematic structure were subsequently reviewed together with the project supervisor. These discussions focused on the interpretation of coded segments, the boundaries between categories, and the placement of codes within broader themes. Through this iterative review process, the coding framework was refined and the final thematic structure was established through consensus. To enhance the credibility of the analysis, a subset of the coded material was independently reviewed by the project supervisor following the initial coding stage. The comparison involved 197 coding decisions drawn from content sampled across all 15 Instagram accounts. Agreement was reached on 179 coding decisions, resulting in an overall agreement rate of 90.86%. The remaining 18 coding decisions were discussed and resolved through consensus. These discussions focused primarily on code definitions, category boundaries, and the placement of specific content segments within the thematic structure. Several limitations of this reliability assessment procedure should be acknowledged. First, reliability was assessed through percentage agreement rather than through a chance-corrected coefficient such as Cohen's kappa or Krippendorff's alpha. Second, the reviewer involved in the reliability assessment process was the project supervisor, who contributed to the development of the theoretical framework and therefore cannot be considered a fully independent coder. Third, the 197 coding decisions reviewed during the reliability

Figure 1. Word cloud generated from the analysis results – Conceptual representation of the most frequently repeated codes by users (generated by the author using MAXQDA based on the study data)

assessment represented approximately 23% of the 848 coded segments rather than the entire coded dataset. These limitations should be taken into consideration when interpreting the reliability of the coding process. Since the dataset consists of publicly accessible Instagram content, informed consent was not required. All data were collected from publicly available sources, and no personally identifiable information was used during the analysis process.

Ethics Statement

This study was based exclusively on content shared through publicly accessible Instagram accounts. No direct interaction with users was conducted, no private data were collected, and no sensitive personal information was analyzed. The research relied solely on publicly available social media content used for academic purposes. Therefore, informed consent was not required. In accordance with institutional guidelines, formal ethical approval was not deemed necessary because the study relied exclusively on publicly available online content.

FINDINGS

Word Cloud Analysis

Word cloud analysis was used to visualize the frequency distribution of prominent concepts in the dataset and to provide a preliminary assessment of thematic density. As a result of this analysis, the dominant concepts and coding categories emerging in the examined accounts were identified. **These themes were classified as environmental threat and scientific discourse, demonstration of sustainable practices, inspirational messages/calls for awareness, discourses of collective consciousness/calls for collective action, critique of consumption and emphasis on ethical responsibility, suggestions for reuse/recycling, zero-waste living recommendations, emphasis on sustainability, and environmentalism and awareness discourse.**

The findings indicate that sustainability-oriented messages in the analyzed content extend across a broad thematic spectrum and aim to generate awareness at both individual and collective levels (**Figure 1**). The word cloud analysis was used to make the conceptual density within the dataset visible at a preliminary stage, while the main analytical framework was developed through the thematic analysis process.

As a result of the analyses, the data related to influencer posts were organized under three main themes (**Figure 2** and **Figure 3**). The main themes identified in the study and brief explanations for each are presented below:

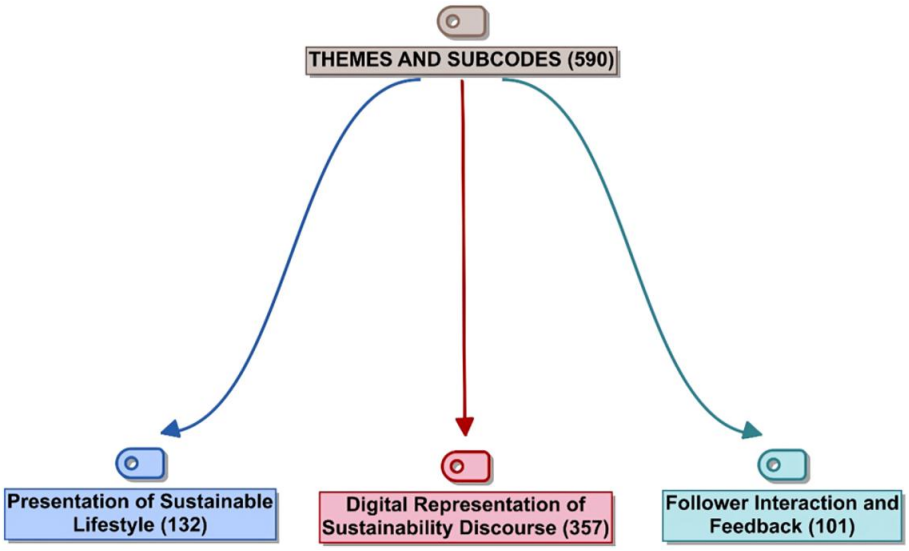

Figure 2. Hierarchical code-subcode model: identified themes (generated by the author using MAXQDA based on the study data)

THEMES AND SUBCODES	0
Presentation of Sustainable Lifestyle	132
Digital Representation of Sustainability Discourse	357
Follower Interaction and Feedback	101

Figure 3. Coding system – Themes and frequency values (generated by the author using MAXQDA based on the study data)

1. **Presentation of sustainable lifestyle (f = 132):** This theme encompasses the ways in which influencers present sustainable lifestyles through both visual and textual elements in their social media posts.
2. **Digital representation of sustainability discourse (f = 357):** This theme refers to the ways sustainability-oriented messages are conveyed through the language, tone, and narrative style used in digital environments.
3. **Follower interaction and feedback (f = 101):** This theme addresses how posts are received, interpreted, and engaged with by followers.

The analysis results indicate that social media data tend to cluster around specific themes and the sub-codes associated with them. Based on the code-subcode segments model, the frequency and content density of the conceptual codes within each theme were analyzed.

The theme **presentation of sustainable lifestyle** demonstrates how influencers make sustainability discourse visible through everyday life practices (**Figure 4**). This theme covers how the influencers included in the sample reflect sustainable ways of living on their social media accounts and how they structure their messages in this context. According to the analysis results, the most frequently emphasized sub-codes within this theme represent the sustainability practices that influencers both adopt themselves and recommend to their followers.

According to the data obtained, the most frequently occurring sub-code was **suggestions for reuse and recycling** (f = 35). This finding indicates that influencers place considerable emphasis on waste management and the efficient use of resources in their social media content. The next most frequent sub-code, **use of natural and local products** (f = 27), points to the importance attributed to local production and natural products within the context of sustainability.

In addition, the sub-code **zero-waste living recommendations** (f = 25) reveals the prevalence of content encouraging environmentally conscious lifestyles aimed at minimizing waste. The sub-code **emphasis on minimalist living** (f = 19) reflects the promotion of reduced consumption and the philosophy of simplicity

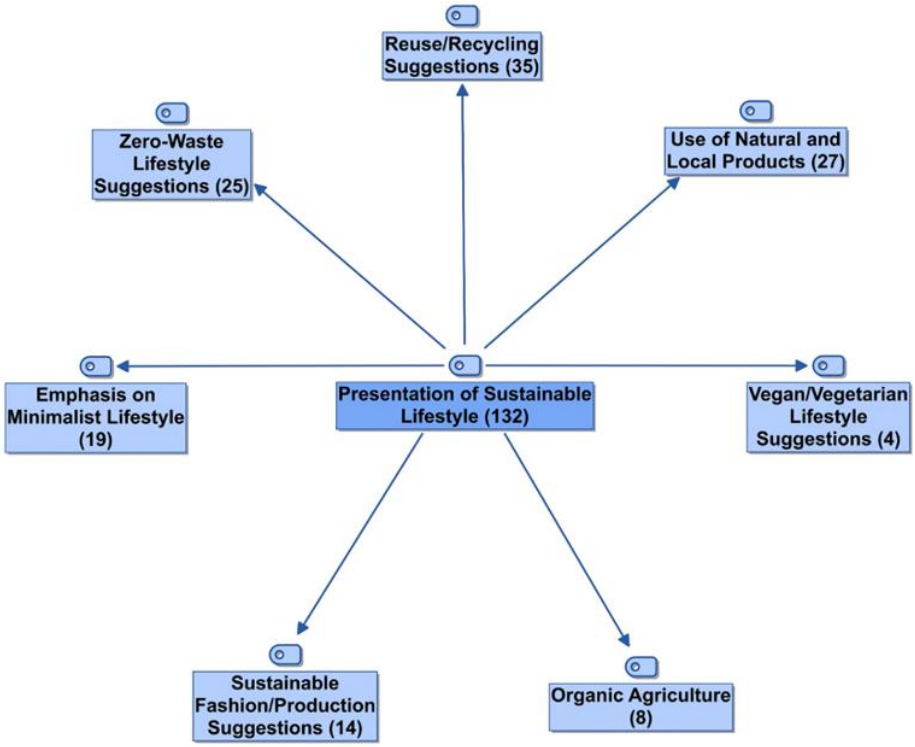

Figure 4. Code-subcode segments model – Distribution of sub-codes under the theme "presentation of sustainable lifestyle" (generated by the author using MAXQDA based on the study data)

through social media. Other notable sub-codes include **sustainable fashion/production recommendations** (f = 14), which support sustainable production and consumption; **organic farming** (f = 8), referring to environmentally friendly agricultural practices; and **vegan/vegetarian lifestyle recommendations** (f = 4), which aim to reduce the consumption of animal products (**Figure 4**).

In influencer posts, sustainability is most often presented through everyday practices such as reuse, zero-waste living, and minimalist consumption. This mode of representation suggests that environmental responsibility is largely expressed through individual patterns of behavior.

The second theme identified in the analysis is **"digital representation of sustainability discourse"** (**Figure 5**). This theme focuses on how influencers construct and circulate sustainability-related discourses and lifestyles within digital platforms.

The analysis results indicate that the codes emerging within this theme play a critical role in shaping perceptions of sustainability in digital environments. The most frequent code is **environmental threat and scientific discourse** (f = 71), which shows that environmental problems are often addressed in influencer posts with reference to scientific arguments. This can be interpreted as a discursive strategy that calls attention to environmental risks and encourages awareness among followers. In addition, the code **discourses of collective consciousness and calls for collective action** (f = 68) reveals the prevalence of content that promotes social awareness and a sense of solidarity around sustainability. Influencers tend to frame this awareness within a discursive structure that encourages collective action in digital spaces.

The code **demonstration of sustainable practices** (f = 51) reflects the presentation of sustainable lifestyle practices through concrete examples on Instagram. Similarly, **inspirational messages and calls for awareness** (f = 45) include motivational posts that encourage followers to act. Other notable codes include **critique of consumption and emphasis on ethical responsibility** (f = 41), which question existing consumption habits and encourage more ethical forms of consumption. In addition, **crisis-oriented discourses** (f = 34) highlight contemporary environmental crises such as climate change, environmental disasters, and forest fires. Finally, the code **calls for the use of renewable energy** (f = 20) indicates that digital discourse also encourages a transition toward clean energy.

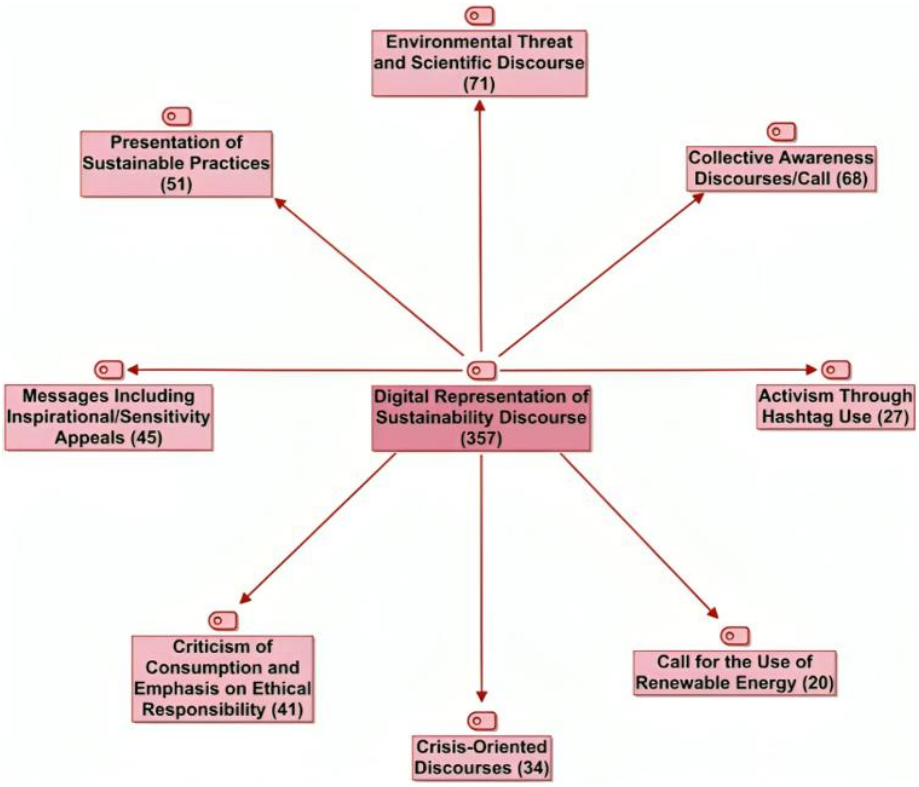

Figure 5. Code-subcode segments model – Distribution of sub-codes under the theme "digital representation of sustainability discourse" (generated by the author using MAXQDA based on the study data)

Overall, this theme reflects a tendency among influencers to legitimize sustainability discourse in online environments through references to scientific sources. The discursive patterns observed within this theme illustrate how sustainability is framed and legitimized in digital contexts. Although references to scientific terminology appear meaningful in the content, these references often function less as direct evidence and more as a way of creating a discursive atmosphere of credibility. References to scientific terminology related to environmental issues are particularly noticeable in influencer posts. However, the current dataset does not allow for a causal interpretation of how these references function within the content. For this reason, the question of how such usage influences perceptions of credibility remains beyond the scope of this study.

Post titles such as "How many plastic items do we use in a day?", "What should we leave for future generations? Olives or mines?" and "What does a zero-waste kitchen look like?" frame solutions to environmental problems primarily through the regulation of individual consumption habits. These titles construct a discursive structure that presents sustainability not through collective political interventions but through everyday practices. Such content suggests that sustainability discourse often moves away from structural solutions and is instead framed in terms of individual responsibility grounded in everyday life practices.

The third major theme identified in the analysis is **"follower interaction and feedback"** (Figure 6). This theme examines how users who follow influencers on social media interact with posts, how they comment on them, and how they perceive the shared content. The analysis results indicate that several sub-codes stand out within this theme. One of the most frequent codes, **emphasis on sustainability** (f = 21), reflects the importance followers attribute to sustainability in the posts and their awareness of the issue. This finding suggests that the follower audience is responsive to the content and shows interest in the topic.

The sub-code **messages of appreciation and support** (f = 16) reveals that users often express positive feedback toward influencer posts, demonstrating support for the shared content. This suggests a predominantly positive pattern of interaction between influencers and followers. The predominance of appreciation and support messages may be interpreted in relation to the horizontal communication style discussed in the digital opinion leadership literature. Rather than engaging in critical debate, followers mostly

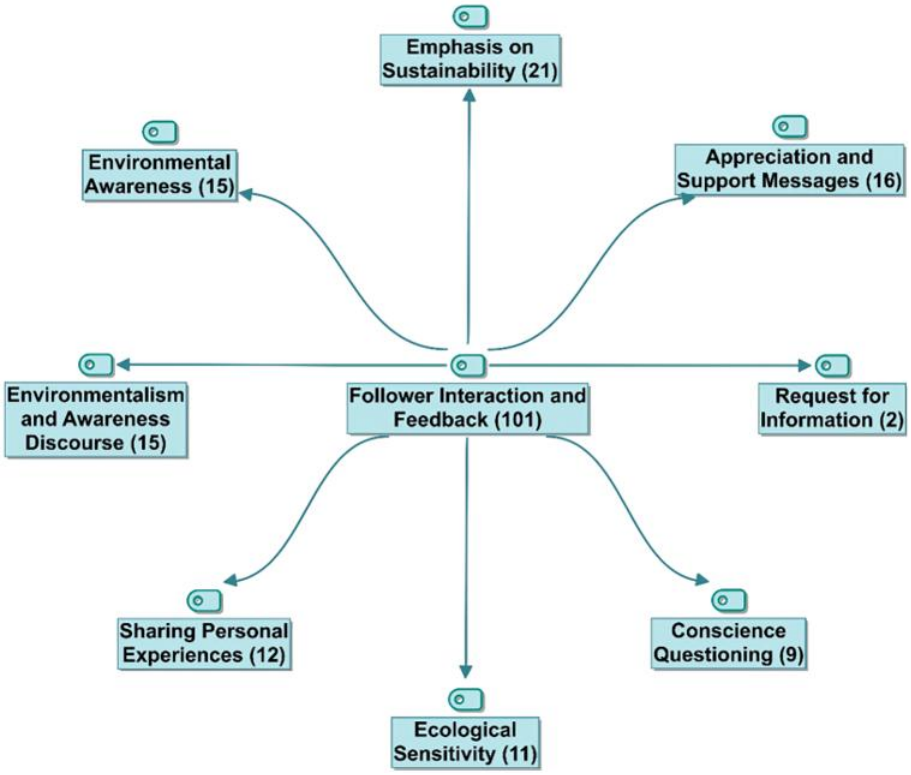

Figure 6. Code-subcode segments model – Distribution of sub-codes under the theme "follower interaction and feedback" (generated by the author using MAXQDA based on the study data)

responded to posts through supportive and encouraging comments. This pattern suggests that sustainability-related content circulates within an interaction environment shaped by shared values and a sense of closeness between influencers and followers. The findings indicate that follower comments tend to reinforce, rather than challenge, the communicative relationship established between influencers and their audiences. In addition, the sub-codes **environmentalism and awareness discourse** (f = 15) and **environmental awareness** (f = 15) show that followers actively engage with posts related to environmental consciousness and sensitivity, and that such topics are widely discussed on social media.

The sub-code **sharing personal experiences** (f = 12) indicates that followers respond to influencer posts by sharing their own sustainability-related practices, observations, and experiences. This may indicate forms of reciprocal communication and interaction among users. In addition, the sub-codes **ecological sensitivity** (f = 11) and **moral self-reflection** (f = 9) reflect followers' responses in which they develop sensitivity toward environmental issues and critically evaluate their own behaviors from an ethical perspective. One of the least frequent codes, **request for information** (f = 2), indicates that only a small number of followers seek further information or ask for more detailed explanations. In the analyzed content, supportive and approving feedback appears to be dominant. Requests for information, however, remain limited. This pattern suggests that the prevailing forms of interaction around sustainability practices tend to be largely affirmational in nature.

DISCUSSION

The findings of this study indicate that social media influencers circulate sustainability discourse largely through everyday life practices. Sustainability-related content is most often presented around individual patterns of behavior and repeatable lifestyle recommendations. This mode of representation partially aligns with studies suggesting that green lifestyle practices are made visible through social media (Chwialkowska, 2019). The prominence of practices such as reuse, zero-waste living, and minimalism in the analyzed content suggests that environmental responsibility is frequently framed in terms of individual behavioral change. While this pattern points to the limited presence of the public and structural dimensions of sustainability

within the content, it also creates the conditions for sustainability discourse to circulate on social media as a lifestyle norm (Stiefvatter, 2022).

Structural relations of production and consumption receive relatively little attention in the analyzed content. This raises the possibility that sustainability may be reduced to a strategy of individual adaptation rather than being framed as a call for systemic transformation. Discussions in the literature suggesting that sustainability may function as a legitimizing discourse (Boschele, 2020; Şen et al., 2018) can therefore be reconsidered in light of these findings.

This tendency also raises broader questions about how sustainability is framed within digital media environments. The findings suggest that environmental responsibility is predominantly communicated through individual lifestyle choices and everyday consumption practices. While such messages may contribute to environmental awareness, they can also shift attention away from structural actors such as corporations, industries, and policy makers. In this sense, sustainability discourse may encourage environmentally responsible behavior without necessarily challenging broader systems of production and consumption. Rather than interpreting this pattern as direct evidence of greenwashing, the findings point to the importance of critically examining how environmental responsibility is defined, distributed, and normalized within influencer-driven sustainability communication. This interpretation also resonates with critical discussions that view sustainability as a discourse that may, under certain conditions, reinforce rather than challenge existing consumption structures (Boschele, 2020; Şen et al., 2018). Although the present findings do not provide direct evidence for such a claim, the predominance of individual behavioral solutions over structural environmental issues suggests an important area for further critical investigation.

In the literature, influencers are often regarded as digital actors who contribute to the production of environmental awareness (Kapoor et al., 2023). The findings of this study suggest that sustainability-related content circulates on social media largely through follower interaction and content production practices. Dekoninck et al. (2023) show that parasocial bonds formed with climate influencers can increase the acceptance of environmental messages. When influencers are perceived by their followers as trustworthy and sincere, this perception can reinforce the process. However, the present dataset does not reveal how these messages are interpreted by followers or whether they are evaluated in a critical manner.

The use of hashtags increases the visibility of content. This strategy aligns with the circulation logic of social media platforms (Jalali & Khalid, 2021). Yet visibility is ultimately shaped by algorithms (Prodnik, 2025). For this reason, sustainability discourse may function not only as an ethical appeal but also as a performance-oriented content strategy within the platform. How this function influences the framing of the discourse remains unclear. Although the theoretical framework highlights the role of platform affordances and algorithmic visibility in shaping communication processes, these dimensions were not directly examined within the scope of the present analysis. The study focused on the thematic representation of sustainability discourse rather than on the infrastructural mechanisms governing content visibility and circulation. Therefore, the findings should be interpreted primarily in relation to content representation rather than as evidence of algorithmic influence.

Similarly, Jiao et al. (2025) demonstrate that trust in social media influencers can influence young users' intentions to share content related to climate change. This finding suggests that sustainability-related content circulates on platforms not only through the characteristics of the content itself but also through the relationship between influencers and their followers. However, within the scope of this study, it cannot be clearly determined to what extent the intention to share is connected to the critical evaluation of the content.

It is also notable that follower comments are largely approving in nature. Requests for information remain very limited (f = 2). This pattern suggests that sustainability-related content tends to reinforce legitimacy rather than generate a space for critical deliberation. Opinion leadership, as discussed in the two-step flow tradition (Katz, 1957), provides a useful framework for interpreting some of the interaction patterns observed in this study. In particular, the predominance of supportive comments and the visibility of influencer-follower interaction may be considered consistent with certain characteristics associated with digital opinion leadership (Dekoninck et al., 2023). The predominance of approving comments may indicate that follower engagement functions more as a mechanism of affirmation than as a space for deliberation or debate. This pattern suggests that support and endorsement are more visible than critical discussion within the analyzed

interactions. However, the present data do not allow direct conclusions regarding influence, persuasion, or behavioral change among followers.

The findings indicate that sustainability discourse on social media extends beyond the simple transmission of environmental information. Instead, it is continuously reshaped through everyday practices, parasocial relationships between influencers and followers, and the interaction dynamics of the platform itself.

CONCLUSION

This study focuses on the thematic frameworks through which influencers who produce sustainability-related content on Instagram in Turkey represent sustainability. The research aims to examine how sustainability is interpreted within digital content. In doing so, it adopts a position that departs from the outcome-oriented evaluations commonly found in influencer research. Accordingly, the central concern of this study is not the extent to which influencers are effective, but rather how sustainability discourse is constructed and circulated within social media environments. At the same time, the findings suggest that sustainability in influencer content is often framed through individual lifestyle practices rather than broader structural environmental change.

The findings demonstrate that sustainability discourse on Instagram cannot be understood solely through textual elements. Visual narratives, the reels format, caption texts, and follower interaction must all be considered together. Sustainability communication is therefore not a one-way transmission of messages; rather, it is a process continuously reconstructed through the platform's technical infrastructure and interaction-based circulation mechanisms. From this perspective, sustainability can be understood not only as a "topic" but also as a form of representation that becomes visible through digital media technologies. At the same time, it should be acknowledged that a distance between representation and action always exists. In this context, the communication practices observed in influencer content may be discussed in relation to characteristics commonly associated with digital opinion leadership. However, the present study does not directly measure influence, persuasion, or behavioral change among followers. Taken together, these findings suggest that sustainability on social media should not be understood only as a thematic category. Rather, it emerges as a platform-mediated form of representation shaped by visual storytelling and interaction dynamics, while questions concerning algorithmic visibility remain beyond the empirical scope of the present study. In this respect, the study offers a contribution to communication research by drawing attention to the ways in which platform infrastructures participate in the construction of sustainability discourse. More specifically, the study contributes to sustainability communication research by showing that sustainability discourse on Instagram is predominantly articulated through everyday lifestyle practices rather than through discussions of structural environmental change. It also contributes to influencer research by approaching influencers not primarily as persuasive marketing actors but as communicative actors involved in the representation and circulation of sustainability-related meanings. In this respect, the findings extend existing discussions of sustainability communication beyond questions of consumption and behavioral influence by focusing on processes of representation, visibility, and digital circulation.

The study is limited to the Instagram platform, and different representational dynamics present on other platforms remain outside the scope of this research. The data were restricted to the period between June 10, 2025, and December 10, 2025. While this time frame allowed for the observation of discursive continuity, it also raises the possibility that visibility peaks associated with seasonal campaigns may have influenced the thematic distribution. In particular, the inclusion of campaign-oriented hashtags (such as #PlasticFreeJuly) within the analysis period suggests that sustainability discourse may have been shaped by specific environmental agendas circulating at that time. This represents an important methodological limitation, as it restricts the interpretation of the findings as universally applicable across all contexts and periods.

Future studies may examine comparatively how sustainability discourse is represented across different social media platforms. In addition, mixed-method research designed to explore how influencer content is interpreted by followers may offer a more comprehensive understanding of the relationship between digital sustainability discourse and behavioral change.

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Ethics declaration: This study analyzed only publicly accessible Instagram content. No human participants were directly involved, no private or sensitive personal data were collected, and no intervention was conducted. Therefore, informed consent and formal ethics committee approval were not required for this study.

AI statement: Generative AI (ChatGPT) was used only to improve the linguistic clarity and readability of the manuscript during the revision process. The study design, literature review, data collection, coding, data analysis, interpretation of the findings, and all final editorial decisions were carried out solely by the author.

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