Identification and Ranking of Digital Social Responsibility Dimensions in Virtual Networks with Emphasis on Instagram

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Abstract: This study aimed to identify and rank the dimensions of digital social responsibility in virtual networks, with an emphasis on Instagram. The statistical population in the qualitative phase included all experts related to the research topic, and interviews continued until theoretical saturation was achieved. Simultaneously with the interviews, data analysis was conducted using content analysis, including open, axial, and selective coding, validated through ATLAS.ti 8 software. In the quantitative phase, data were analyzed using SPSS and AMOS software. The analytical process included the calculation of statistical indices such as mean, standard deviation, Kendall's coefficient of concordance, and exploratory and confirmatory factor analysis. These analyses were conducted to assess the validity and reliability of the questionnaire and the research model. In the data analysis, 261 initial concept codes, 8 main concept codes, and 31 sub-concept codes were identified to explain the primary concepts. The quantitative findings indicated that all dimensions of digital social responsibility in virtual networks, with an emphasis on Instagram, were significant at the 0.01 level. This means that the effect of each dimension of digital social responsibility in virtual networks, focusing on Instagram, was greater than the hypothetical mean of 3, and this difference was statistically significant. Furthermore, the ranking of the dimensions revealed that each component was evaluated relative to others based on its average ranking. Components with higher average rankings were considered more important. A significance level of less than 0.05 indicated that the observed differences in rankings were statistically significant. Based on the research findings, the results demonstrated that all dimensions of digital social responsibility on Instagram were assessed above the average level and held special importance for users. These differences were not only significant but also indicated that Instagram users paid considerable attention to these dimensions and expected the platform to adhere to higher standards in these areas. The ranking results showed that the various dimensions of digital social responsibility in virtual networks, with an emphasis on Instagram, were valued differently by users, with significant differences in their prioritization.

Keywords: Digital Social Responsibility Dimensions, Virtual Networks, Instagram

1. Introduction

In today's digital era, virtual networks have become an integral part of our lives, providing platforms for communication, self-expression, and social interaction. Among these virtual networks, Instagram stands out as a

popular and influential platform that has significantly impacted our society. However, with the increasing use of Instagram, the need to understand its impact on digital social responsibility has grown [1]. Digital social responsibility refers to the adherence to ethical and social principles in the use of digital space and related technologies. These concepts have gained particular importance in virtual social networks, where users, companies, and organizations continuously use these platforms for personal, commercial, and social interactions [2, 3].

In the context of virtual social networks such as Instagram, various dimensions of digital social responsibility are discussed, including privacy and the protection of users' personal information, which are among the most critical aspects. Instagram and other social networks must ensure that users' data are not shared unauthorizedly and that privacy protection is respected. This has become increasingly important, especially in light of new privacy regulations such as the GDPR in Europe [4, 5]. Given that the content published on Instagram and other social networks can have profound social and psychological impacts on audiences, digital social responsibility includes the responsible use of platforms for content sharing. This content should be free from hate, discrimination, and misinformation [6].

In the digital world, social responsibility includes attention to the social, cultural, and even political impacts of online content and activities. Users and companies must recognize that their content can influence identities, cultures, and even policies [7].

On Instagram, many brands use the platform for advertising purposes. Digital social responsibility also involves adhering to ethical principles in advertising, including transparency in product presentation, avoiding consumer deception, and the responsible use of influencers (Huang & Lee, 2023). Social networks such as Instagram, if misused, can lead to issues such as social media addiction, depression, and social anxiety. Digital social responsibility, especially on Instagram, emphasizes the importance of preventing psychological harm [8, 9].

Digital social responsibility encompasses various dimensions, ranging from privacy and data protection to adherence to ethical principles in advertising and the prevention of psychological harm. On social media platforms such as Instagram, users, brands, and organizations must seriously observe their social responsibilities to create a healthier and safer digital environment for everyone [10-12].

A study conducted between 2020 and 2024 emphasized the need for greater attention to the social and ethical dimensions of digital social responsibility on Instagram, as these aspects have the most significant impact on user interactions and the exchange of accurate information in the virtual space [10]. Additionally, the growing volume of user-generated content has increased the need for educational and monitoring programs to enhance ethical and social awareness in the online space. These programs can help improve responsible user behavior and prevent the spread of incorrect or harmful information.

Moreover, recent studies indicate that virtual spaces, particularly Instagram, due to their extensive content-sharing capabilities, can serve as suitable platforms for promoting digital social responsibility. However, achieving this goal requires precise strategies and continuous monitoring to ensure that users' rights are properly protected and that social interactions proceed in an ethical and constructive manner [8, 9].

The research gap in identifying and ranking the dimensions of digital social responsibility in virtual networks, particularly on Instagram, is attributed to the lack of a comprehensive and practical model for evaluating and prioritizing various dimensions of digital social responsibility. While some studies have examined these dimensions, few comprehensive studies have fully identified and ranked digital social responsibility dimensions in virtual networks, particularly on Instagram. Furthermore, most existing research has been quantitative, with

fewer qualitative studies. Additionally, the existing studies have highlighted the lack of practical solutions to enhance digital social responsibility in user interactions and the management of user-generated content.

The nature of user interactions on Instagram and how ethical, legal, and social challenges are addressed in this digital space have not been thoroughly analyzed. Moreover, precise methods and criteria for evaluating digital social responsibility in these networks, especially in terms of raising user awareness and combating negative and false content, have not been defined. This study aims to answer the following research question:

"What dimensions of digital social responsibility exist in virtual networks, particularly on Instagram, and how can these dimensions be identified and ranked to improve user behavior and ethical and social interactions in this space?"

2. Methodology

This study is classified as a mixed-methods research, with the qualitative phase conducted using the grounded theory approach due to the novelty of the subject. The qualitative study population included all experts related to the research topic who possessed relevant academic background and professional experience. In other words, the research population consisted of experts in the field of digital social responsibility and virtual networks. The selection of study samples was conducted through theoretical sampling. The inclusion criteria for the study were: having academic or practical experience, willingness to cooperate and share experiences, and possessing diverse and extensive experience in the subject matter. The exclusion criterion was the participant's unwillingness to continue the interview. Sampling began with the first interview and continued until theoretical saturation was reached. Saturation refers to the point at which new participants' responses to interview questions are similar to those provided by previous participants. Theoretical saturation was achieved after conducting interviews with 120 experts in relevant fields. In the quantitative phase, during the Delphi phase, the same experts were surveyed, while in the survey phase, Instagram employees and users were included. In the Delphi phase, sampling was conducted using a purposive method, whereas in the survey phase, 375 participants were selected randomly.

In the qualitative phase, data were collected using semi-structured in-depth interviews, with a preference for face-to-face interviews. In specific circumstances, such as when the interviewee was located abroad, online platforms such as email, Google Meet, and Skyroom were used. Sample interview questions included:

- How would you define digital social responsibility in virtual spaces, and why is it important?
- What dimensions of digital social responsibility in virtual networks should be considered?
- What challenges and obstacles exist in implementing digital social responsibility in networks like Instagram?
- What strategies and solutions do you propose to improve digital social responsibility in virtual networks?
- What roles do users and organizations play in enhancing social responsibility in virtual spaces?
- What mechanisms are effective for monitoring and evaluating digital social responsibility in virtual networks?

In the quantitative phase, data were collected from 375 respondents using a researcher-developed questionnaire derived from the qualitative study findings.

In the qualitative phase, interviews commenced in 2023 and continued until mid-2024, concurrently with data coding. In the first phase of theoretical sampling, 12 initial interviews were conducted, during which events, concepts, and categories gradually emerged. Subsequently, in the second phase, sampling focused on axial categories. Coding in the second phase was conducted based on the impact of axial codes on the process. Data

analysis of interview transcripts was carried out concurrently with data collection using ATLAS.ti 8 software, employing an emergent approach that included open, selective, and axial coding. Throughout all stages, field notes were documented. After reaching saturation, theoretical memo sorting was conducted, providing an overall theoretical framework for constructing the grounded theory. Once the memos were sorted, the most relevant theoretical codes were selected. Theoretical sorting and coding were conducted simultaneously.

To ensure the validity and reliability of the research data, Glaser's (1998) four criteria were applied: fit, work, relevance, and modifiability.

- **Fit:** Categories must emerge from the data rather than being predetermined by theoretical perspectives. In this study, categories emerged solely from the collected data, with researchers adopting a non-judgmental approach.
- **Work:** This refers to whether the concepts address the main concerns of the participants. In this study, selective coding was derived directly and indirectly from participant responses, and field notes assisted in interpreting participants' actions and decisions.
- **Relevance:** Achieved when the theory is deemed important, logical, and meaningful to participants and stakeholders. This criterion was addressed through semi-structured interviews and participants' perspectives.
- **Modifiability:** The theory must remain flexible enough to be revised with new data or changes in context, ensuring the possibility of refinement and modification. Consequently, grounded theory is an ongoing process with potential for further development.

To enhance the credibility of the research data, researchers invested significant time in writing theoretical memos throughout the study and reviewing and analyzing categories with the assistance of three participants as observers, incorporating their feedback into axial coding. Moreover, efforts were made to ensure the inclusion of a broad range of perspectives from various disciplines and diverse expert groups to enhance the validity of the interview process.

In the quantitative phase, data were analyzed using SPSS 26 and AMOS software. The analytical process included statistical calculations such as mean, standard deviation, Kendall's coefficient of concordance, and exploratory and confirmatory factor analyses. These analyses aimed to assess the validity and reliability of the questionnaire and the research model.

3. Findings

The findings indicated that the largest number of Instagram users fall within the age group of "19 to 25 years," reflecting the high popularity of this social network among young people. The age groups "26 to 30 years" and "18 years and younger" also constitute a significant percentage of users, highlighting the widespread use of Instagram among teenagers and young adults. In contrast, the age groups "30 to 35 years" and "35 years and older" represent a smaller percentage of users, which may suggest a decline in Instagram usage with increasing age. Additionally, the gender distribution analysis revealed that the number of male and female users in the sample was nearly equal, with each gender comprising approximately 50% of the total sample of 375 participants. This balanced gender distribution suggests that Instagram is used equally by both men and women. Furthermore, the frequency distribution of educational levels showed that the majority of Instagram users in this sample hold a bachelor's degree, accounting for about 50% of the total sample. The group "associate degree and below" also represents a considerable portion of users, indicating the presence of users with secondary and lower education levels on

Instagram. The "above bachelor's degree" group constitutes the smallest percentage, which may suggest a decrease in Instagram usage with higher education levels.

Following the analysis of interviews conducted with 20 experts in related fields, a total of 261 initial concept codes, 8 main concept codes, and 31 sub-concept codes were identified to explain the key concepts, which are elaborated on below.

A) Open Coding: In this phase, the process began with the first interview, and statements were summarized and categorized into concepts according to the open coding method to facilitate further analysis.

B) Axial Coding: In this stage, the researcher carefully examined and logically arranged the concepts based on the research questions. Concepts and categories obtained from the open coding stage were compared, combined, and integrated, then refined and synthesized. Using intellectual and abstract creativity, the researcher connected the obtained meanings according to their interrelations and organized them into several main axes or theoretical connections. Table 1 provides an example of this process.

Table 1. Sample Process of Axial Coding

No.	Axial Code	Open Code
1	Transparency and Honesty	Transparency in providing information, honesty in reporting, trust-building
2	Privacy Protection	Safeguarding personal data, respecting privacy, information security
3	Positive Audience Interactions	Responding to audience needs, respecting feedback, effective communication
4	Media Literacy Enhancement	Educating on proper social media use, improving digital knowledge
5	Promotion of Digital Ethics	Encouraging ethical behavior, adhering to digital ethical principles, accountability
6	Support for Social Issues	Participation in social activities, supporting charitable organizations
7	Content Monitoring	Quality control, content review and management, adherence to standards
8	Cultural and Social Responsibility	Publishing cultural content, respecting cultural values, cultural participation
9	User Behavior Management	Encouraging responsible behavior, managing comments and activities
10	Content Quality Improvement	Enhancing the quality of information and data, providing educational content
11	Environmental Responsibility	Environmental protection, minimizing the negative impact of networks on the environment
12	Development of Digital Social Services	Expanding online services for societal benefit, corporate responsibility
13	Trust-Building in Virtual Space	Creating and maintaining user trust, protecting sensitive information
14	Crisis Management	Responding to social crises, managing news and information during crises
15	Positive Role Models on Social Media	Promoting positive behavioral patterns, advocating appropriate behaviors
16	Utilization of New Technologies	Leveraging new technologies, innovations in digital tools
17	User Education and Empowerment	Educational programs, empowering users to effectively use networks
18	Performance Evaluation and Assessment	Evaluating the impact of activities, analyzing content performance
19	Adherence to Laws and Regulations	Compliance with legal standards, regulatory requirements
20	Awareness and Culture-Building	Increasing public awareness, promoting digital culture
21	Creating a Safe and Healthy Environment	Providing a secure space for users, preventing digital threats
22	Stakeholder and Community Engagement	Collaboration with stakeholders, social organizations
23	Addressing Complaints and Issues	Resolving user complaints, addressing problems
24	Digital Resource Management	Optimizing the use of digital resources, content management
25	Development of Digital Strategies	Formulating new strategies, updating digital policies
26	Planning and Organizing	Activity planning, organizing digital projects
27	Financial Responsibility	Managing financial resources, controlling costs in digital projects
28	Social Impact Assessment	Analyzing the social impacts of activities, evaluating social outcomes
29	Prevention of Digital Abuse	Preventing online misuse, combating security threats
30	Support for Research and Development	Investing in research and development, supporting innovation
31	Enhancement of International Interactions	Developing international interactions, collaborating with global organizations

The axial codes identified include: transparency and honesty, which encompass transparency in providing information, honesty in reporting, and trust-building; privacy protection, which includes safeguarding personal data, respecting privacy, and ensuring information security; positive audience interactions, which focus on responding to audience needs, respecting feedback, and effective communication; media literacy enhancement, which covers education on proper social media usage and improving digital knowledge; promotion of digital ethics, which involves encouraging ethical behavior, adhering to digital ethical principles, and accountability; support for social issues, which includes participation in social activities and supporting charitable organizations; content monitoring, which pertains to quality control, content review and management, and adherence to standards; cultural and social responsibility, which involves publishing cultural content, respecting cultural values, and cultural participation; user behavior management, which includes encouraging responsible behavior and managing comments and activities; content quality improvement, which focuses on enhancing the quality of information and data, and providing educational content.

Further identified axial codes include environmental responsibility, which pertains to environmental protection and minimizing the negative impact of networks on the environment; development of digital social services, which includes expanding online services for societal benefit and corporate responsibility; trust-building in the virtual space, which involves creating and maintaining user trust and protecting sensitive information; crisis management, which focuses on responding to social crises and managing news and information during crises; providing positive role models on social media, which involves promoting positive behavioral patterns and advocating appropriate behaviors; utilization of new technologies, which includes leveraging new technologies and innovations in digital tools; user education and empowerment, which covers educational programs and empowering users to utilize networks effectively; performance evaluation and assessment, which involves evaluating the impact of activities and analyzing content performance; adherence to laws and regulations, which covers compliance with legal standards and regulatory requirements; awareness and culture-building, which focuses on increasing public awareness and promoting digital culture; creating a safe and healthy environment, which involves providing a secure space for users and preventing digital threats; stakeholder and community engagement, which includes collaboration with stakeholders and social organizations; addressing complaints and issues, which involves resolving user complaints and addressing problems; digital resource management, which covers optimizing the use of digital resources and content management; development of digital strategies, which includes formulating new strategies and updating digital policies; planning and organizing, which pertains to activity planning and organizing digital projects; financial responsibility, which involves managing financial resources and controlling costs in digital projects; social impact assessment, which includes analyzing the social impacts of activities and evaluating their social outcomes; prevention of digital abuse, which involves preventing online misuse and combating security threats; support for research and development, which includes investing in research and development and supporting innovation; and enhancement of international interactions, which involves developing international interactions and collaborating with global organizations.

C) Selective Coding: Selective coding is the final step in the analysis process, during which the integration of concepts around a core category takes place, and additional categories required for further development and refinement in the future are established. At this stage, analytical notes and diagrams reflect the depth and complexity of the thought process behind the emerging theory. It should be acknowledged that this coherence and integration is not achieved instantly; rather, it is a process that begins with the initial data analysis and continues until the final reporting stage. In this phase, the core category of the study is identified, and the main theme is

narrated as a story or report based on the collected data, bringing the coding process to its final stage. Table 3 presents the selective coding process.

D) Final Model Presentation: The final model of digital social responsibility in virtual networks, with an emphasis on Instagram, is depicted in Figure 1.

Table 2. Selective Coding Process

Selective Code	Axial Codes
Transparency and Accountability	Transparency and Honesty, Financial Accountability, Cultural and Social Accountability, Environmental Accountability
Privacy Protection and Security	Privacy Protection, Creating a Safe and Healthy Environment, Prevention of Digital Abuse
Interactions and Communications	Positive Audience Interactions, Stakeholder and Community Engagement, Addressing Complaints and Issues
Content and Quality	Content Quality Improvement, Content Monitoring, Promoting Positive Role Models on Social Media
Development and Progress	Development of Digital Social Services, Support for Research and Development, Enhancement of International Interactions
Management and Planning	User Behavior Management, Social Crisis Management, Planning and Organizing
Awareness and Education	Promotion of Digital Ethics, Awareness and Education, User Empowerment
Evaluation and Monitoring	Performance Evaluation and Assessment, Social Impact Assessment, Compliance with Regulations

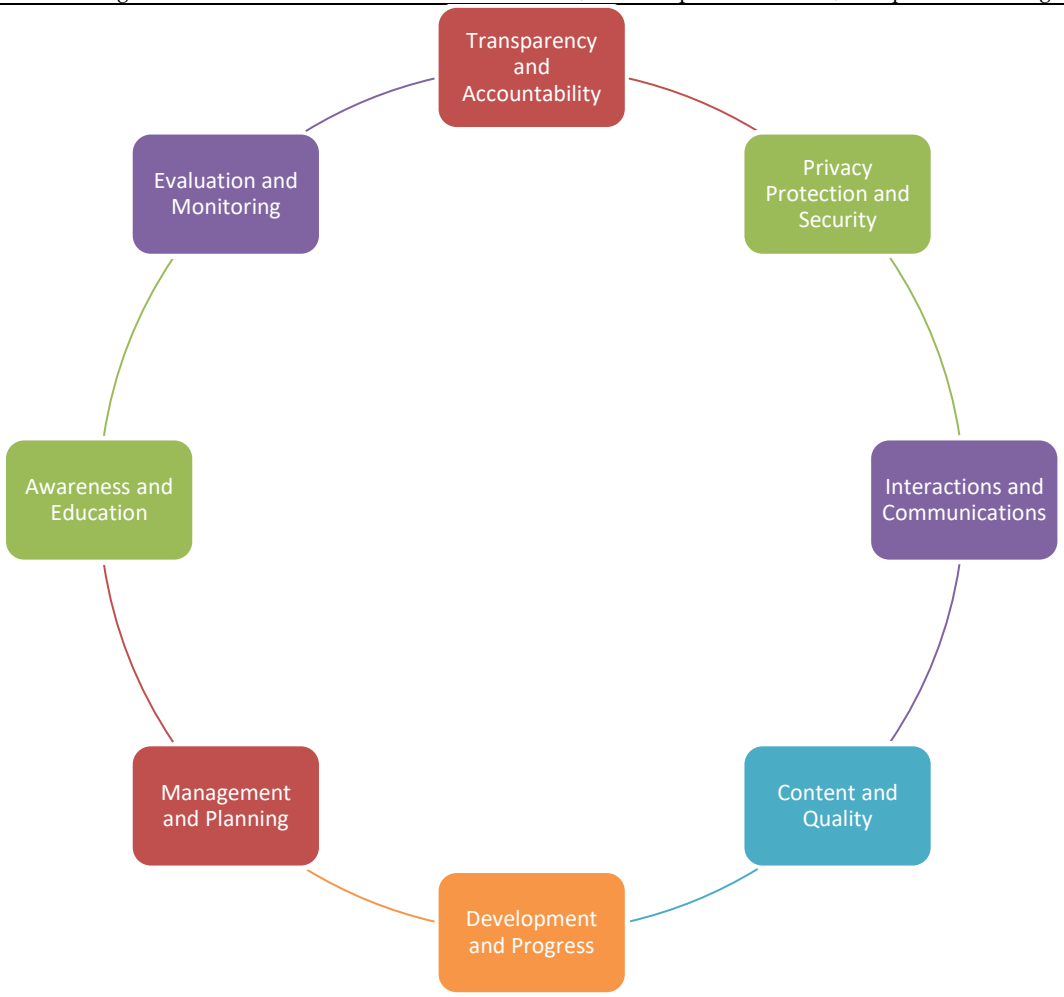

Figure 1. Final Model of Digital Social Responsibility in Virtual Networks with Emphasis on Instagram

Table 3 compares the mean effect of digital social responsibility dimensions in virtual networks with an emphasis on Instagram, using a hypothetical mean of 3.

Table 3. Comparison of the Mean Effect of Digital Social Responsibility Dimensions in Virtual Networks with an Emphasis on Instagram (Hypothetical Mean = 3)

Component	Mean	Standard Deviation	Deviation from Mean	t-value	Degrees of Freedom	Significance Level
Transparency and Accountability	4.32	0.98	1.32	26.1	374	0.01
Privacy Protection and Security	4.57	0.69	1.57	44.03	374	0.04
Interactions and Communications	4.40	0.90	1.40	30.35	374	0.04
Content and Quality	4.32	0.76	1.32	33.37	374	0.04
Development and Progress	4.14	0.78	1.14	28.05	374	0.05
Management and Planning	4.47	0.96	1.47	29.54	374	0.04
Awareness and Education	4.16	0.54	1.16	41.82	374	0.03
Evaluation and Monitoring	4.84	0.54	1.84	65.47	374	0.04

The findings in Table 3 indicate that all dimensions of digital social responsibility in virtual networks, with an emphasis on Instagram, are statistically significant at the 0.01 level. This means that the impact of each dimension exceeds the hypothetical mean of 3, and this difference is statistically significant.

To address the research question regarding the ranking of digital social responsibility dimensions in virtual networks with an emphasis on Instagram, the Friedman test was used, and the results are presented in Table 5.

Table 4. Mean Ranking of Digital Social Responsibility Dimensions in Virtual Networks with an Emphasis on Instagram

Component	Mean Rank	Chi-square	Degrees of Freedom	Significance Level
Transparency and Accountability	4.84	19.64	374	0.03
Privacy Protection and Security	6.01	19.64	374	0.03
Interactions and Communications	5.22	19.64	374	0.03
Content and Quality	4.81	19.64	374	0.03
Development and Progress	3.97	19.64	374	0.03
Management and Planning	5.52	19.64	374	0.03
Awareness and Education	4.06	19.64	374	0.03
Evaluation and Monitoring	7.24	19.64	374	0.03

The results in Table 4 show that each component was ranked based on its mean rank compared to other components. Components with higher mean rankings are considered more important. The chi-square value indicates the degree of difference between the observed and expected rankings. The degrees of freedom, calculated based on the total sample size (375), aid in statistical analysis. A significance level of less than 0.05 indicates that the observed differences in rankings are statistically significant. These results can assist researchers in focusing on specific dimensions of digital social responsibility that hold the most importance in virtual networks. Based on the mean ranking, the components in order of importance are as follows: (1) Evaluation and Monitoring, (2) Privacy Protection and Security, (3) Management and Planning, (4) Interactions and Communications, (5) Transparency and Accountability, (6) Content and Quality, (7) Awareness and Education, and (8) Development and Progress. This ranking reflects the relative importance of each component in the context of digital social responsibility in virtual networks, with an emphasis on Instagram.

The final research question addressed the validity of the obtained model. Based on the collected data and the analysis presented in this study, the obtained model holds statistical validity. Kendall's coefficient of concordance

was 0.05 in the first round and improved to 0.20 in the second round, indicating better alignment and agreement among panel members in the second round. Additionally, the standard deviation of importance increased from 2.34 in the first round to 2.73 in the second round, suggesting a wider range of expert opinions in the second round. However, the standard deviation of relevance remained at 0.15 across both rounds, indicating stability in expert opinions regarding the relationship between indicators and components. In terms of significance levels, the most frequent significance level in the first round was 0.01, whereas in the second round, it shifted to 0.001, reflecting increased precision and significance in the second round. Therefore, the obtained model possesses acceptable validity and demonstrates improvements in consensus and accuracy among experts over the study rounds.

4. Discussion and Conclusion

This mixed-methods study aimed to identify and rank the dimensions of digital social responsibility in virtual networks, with an emphasis on Instagram. According to the participants' perspectives, digital social responsibility in virtual networks, particularly Instagram, consists of eight main dimensions, each referring to different aspects of behavior and interactions within this space. The first dimension focuses on transparency and accountability, highlighting concepts such as transparency and honesty in performance and information dissemination, financial, cultural, and social accountability, as well as commitment to environmental preservation. This dimension clearly indicates that users and organizations must be accountable and transparent regarding their decisions and actions on virtual networks, ensuring honesty in their interactions. Commitment to accountability in all social aspects, including cultural and environmental issues, is considered a necessity in this space.

The second dimension pertains to privacy protection and security. In the digital space, where personal information is readily accessible, safeguarding this data is crucial. Participants emphasized the importance of creating a safe and healthy environment for users, where digital abuse is minimized, and users can engage confidently with their privacy protected. This dimension underscores the responsibility of platforms and users in maintaining data security and preventing unauthorized access to personal information.

The third dimension covers interactions and communications. In Instagram and other social networks, positive interactions with audiences and stakeholders are of great importance. Participants believe that interactions within this space should enhance relationships among users and foster a friendly and constructive environment. Addressing user complaints and issues is another aspect of these interactions that must be taken seriously to ensure a positive user experience on these platforms.

The fourth dimension is dedicated to content and its quality. This dimension emphasizes the need to improve content quality in virtual networks. Participants believe that content shared in this space should be valuable and meaningful, avoiding the spread of false or harmful information. Additionally, providing positive role models for users is one of the key requirements of this dimension, ensuring that the virtual space functions not only as an entertainment platform but also as an educational and cultural environment.

The fifth dimension emphasizes development and progress in the digital space. The expansion of digital social services and support for research and development are two significant components of this dimension. Furthermore, attention to societal needs and international developments through the enhancement of new technologies and increased international interactions are other critical topics discussed. Social networks must continuously evolve and improve to meet the changing needs of society.

The sixth dimension highlights management and planning. This dimension refers to managing user behaviors, handling social crises, and precise planning and organization to address future challenges. Social media platforms

must implement effective strategies to manage the digital space and control disruptive behaviors, preventing disorder and chaos.

The seventh dimension relates to awareness and education in the virtual space. Participants believe that users should receive necessary training for the responsible and proper use of this space. Promoting digital ethics and raising awareness for the productive and healthy use of virtual networks is of great importance. This dimension aims to empower users to utilize this space consciously and responsibly.

Finally, the eighth dimension focuses on evaluation and monitoring of activities in the virtual space. It includes performance analysis of platforms and users, assessing the social impacts of activities, and monitoring compliance with regulations and policies. Participants emphasized the need for a robust monitoring system to ensure that all activities comply with regulations and contribute to improving the social environment.

These eight dimensions provide a comprehensive representation of digital social responsibility in virtual networks, emphasizing that transparent, responsible, and constructive behaviors should be promoted within this space. These dimensions underscore the necessity of social responsibility for both users and platforms and their commitment to improving the digital community.

The quantitative results of the study showed that the dimensions of digital social responsibility in virtual networks, with an emphasis on Instagram, were significantly rated above the hypothetical mean (3). This indicates that Instagram users consider these dimensions highly important and influential on their digital experience. For example, transparency and accountability, with an average score of 4.32, reflect that users expect Instagram to operate transparently and take responsibility for its actions. The 1.32-unit deviation from the hypothetical mean demonstrates the special importance of this dimension to users, with a t-value of 26.1 confirming its statistical significance. Similarly, privacy protection and security, with an average of 4.57, revealed that safeguarding personal information is very important for users, who regard it as one of the core aspects of digital social responsibility. This dimension, with a deviation of 1.57 units from the hypothetical mean, had the highest impact, and the t-value of 44.03 confirmed the significance of the difference.

Interactions and communications, with an average of 4.4, and content and quality, with an average of 4.32, also indicated that users consider these aspects as integral to their digital experience on Instagram. These dimensions are respectively 1.4 and 1.32 units above the hypothetical mean, with t-values of 30.35 and 33.37 highlighting their importance.

Overall, these research findings indicate that all dimensions of digital social responsibility in Instagram were evaluated above the average level and hold significant importance for users. These differences are not only statistically significant but also demonstrate that Instagram users pay considerable attention to these dimensions and expect the platform to adhere to higher standards in these areas.

The ranking results from the quantitative section showed that evaluation and monitoring ranked highest, with a mean ranking of 7.24, indicating the importance of this dimension. This could be because users expect comprehensive evaluation and monitoring processes on social networks like Instagram, ensuring oversight of published content and interactions. Privacy protection and security ranked second with a mean score of 6.01, reflecting the high priority users place on the protection of their data and personal information. Users expect Instagram to pay special attention to their data security and privacy. Management and planning, with an average score of 5.52, ranked third, highlighting that users expect social networks to be managed efficiently and strategically to enhance their experience.

Overall, the ranking results indicated that different dimensions of digital social responsibility in virtual networks, with an emphasis on Instagram, were valued differently by users. The Friedman test, used for ranking these dimensions, revealed significant differences in user prioritization.

To improve digital social responsibility in virtual networks, it is recommended that platforms develop transparent and comprehensible policies for safeguarding user privacy and security. Educational programs should be implemented to enhance user awareness regarding digital ethics and responsible interactions. Future research can focus on evaluating the impact of these policies on user behavior and improving the digital social environment by proposing strategies for better content management and preventing the spread of misinformation.

Authors' Contributions

Authors equally contributed to this article.

Ethical Considerations

All procedures performed in this study were under the ethical standards.

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Conflict of Interest

The authors report no conflict of interest.

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