

A Quantitative Study on Social Media Usage Patterns and Their Effects Among Internet Users

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Abstract

This research conducts a quantitative analysis of social media usage habits and their effects among internet users, utilizing a secondary dataset of 999 respondents drawn from the Social Media Usage Survey available on Kaggle. Employing a descriptive-survey design, the study adopts a quantitative approach to examine behavioral tendencies, demographic variations, and relationships among variables such as usage duration, user motivation, privacy awareness, and intentions to reduce social media activity. Data analysis was performed using Python, incorporating descriptive statistics, crosstab analysis, and visual analytics through the Pandas, Matplotlib, and Seaborn libraries. The findings reveal that social media is deeply embedded in everyday routines, with users averaging 3.5 hours of screen time per day. Instagram, Facebook, and Twitter/X emerge as the most frequently used platforms, serving purposes that include entertainment, information access, and business promotion. Video-based content dominates user preferences, reflecting the broader global media consumption trend. Additionally, 69% of respondents acknowledge that social media influences their purchasing behavior, while 65% express moderate to high levels of privacy concern. Notably, about 68% of users report an intention to reduce their screen time, indicating a growing awareness of the need for digital balance. Correlation analysis shows that individuals with longer screen durations and heightened privacy concerns are more likely to intend reducing their usage, suggesting that excessive engagement may drive self-regulatory behavior. These insights illustrate the dual nature of social media—as a medium for empowerment and connectivity, yet simultaneously a potential source of psychological fatigue. Overall, this study contributes empirical evidence supporting efforts to foster healthy and responsible digital engagement, enriching the broader discourse on digital well-being, online literacy, and sustainable technology use in the modern digital landscape.

Keywords: Internet Usage Habits, Social Media, Impact, Quantitative Analysis, Survey.

1. Introduction

The digital transformation era marks a fundamental turning point in how societies operate, driven by the rapid integration of the internet into nearly all aspects of human activity. The expansion of online connectivity has reshaped the foundations of communication, learning, business, and entertainment. As of 2024, more than 5.5 billion people, or approximately two-thirds of the global population, are connected to the internet, and over 95% of them actively use social media platforms. On average, individuals spend more than six hours per day engaging with digital platforms, demonstrating how integral online interaction has become to daily routines [1]. This unprecedented level of connectivity has redefined social engagement, enabling individuals to communicate and collaborate beyond geographical boundaries and fostering a truly global digital culture [2].

Social media lies at the core of this transformation, functioning as both a technological and social phenomenon. Conceptually, it refers to online platforms that enable users to generate content, share experiences, and form communities through continuous interaction [2]. These digital environments have evolved into complex ecosystems where individuals express identity, exchange knowledge, and participate in global discourse. From a behavioral perspective, repeated engagement with social media platforms forms patterns that gradually become automatic and habitual. Psychological theories of habit formation describe this as the process through which repeated behaviors, reinforced by reward mechanisms such as likes and notifications, become ingrained and often unconscious [3].

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Consequently, social media usage has moved beyond being a tool—it has become a behavioral routine deeply embedded in everyday life [3].

The dual nature of social media use presents both opportunities and challenges for modern society. On one hand, it serves as a powerful means of communication, information dissemination, and business innovation, supporting education and economic participation across all social levels [2]. On the other hand, excessive or unregulated use has been linked to negative outcomes such as addiction, decreased attention span, disinformation, and privacy violations [4]. Studies have also noted associations between heavy social media use and psychological issues such as anxiety, loneliness, and depression, especially among younger users [5]. Thus, the same platforms that empower global connectivity can also contribute to emotional strain and digital fatigue when use becomes excessive or compulsive.

At the national and individual levels, the implications of social media use are particularly visible in rapidly digitizing societies such as Indonesia. According to the 2024 APJII survey, national internet penetration reached 77%, demonstrating the country's accelerated digital engagement [2]. Social media has become an integral aspect of social interaction, education, and commerce, especially among millennials and Generation Z. However, along with its benefits in promoting business growth and civic engagement, studies also highlight emerging concerns such as reduced productivity, dependency, and declining face-to-face communication [6]. These findings suggest that social media plays a dual role: as both an enabler of progress and a potential disruptor of psychological balance and social cohesion [3].

Despite the growing body of research, significant gaps remain in understanding the behavioral mechanisms and quantitative relationships behind social media use. Many existing studies rely heavily on qualitative or descriptive approaches, focusing on individual platforms or limited demographic groups [7]. Few have comprehensively analyzed large-scale survey data to explore how factors such as screen time duration, motivation for use, and privacy concerns interact with the intention to reduce usage. This lack of quantitative insight limits the ability to design effective digital literacy programs and intervention strategies aimed at promoting healthier online habits. Therefore, a more data-driven approach is essential to capture the full spectrum of behavioral patterns in social media engagement.

This study addresses that gap by conducting a quantitative analysis of social media usage habits among 999 respondents using data obtained from an online survey. Employing Python-based descriptive and relational statistical methods, the research aims to map user demographics, platform preferences, motivations, and impacts in a comprehensive manner. The methodological novelty lies in integrating behavioral analysis with digital data processing to identify underlying patterns of interaction [1]. The outcomes of this research are expected to provide valuable insights for educators, policymakers, and mental health professionals, supporting the development of digital well-being initiatives and fostering responsible use of social media in the modern information society.

2. Literature Review

2.1. Internet and Social Media in the Digital Era

The evolution of the internet and the digital transformation era has reshaped global societies, fundamentally altering how individuals connect, communicate, and create value. Theoretical perspectives on internet usage emphasize the concepts of connectivity and the network society. Connectivity acts as the foundation of the digital age, allowing unprecedented communication and interaction between individuals, organizations, and institutions worldwide [6]. The theory of the network society, proposed by Castells, highlights the way information flows now determine social structures and power relationships within society. This transformation signifies not only a technological change but a social one, where digital connections increasingly define economic and cultural participation [6]. The rise of the network society underscores how the internet has facilitated both decentralization and concentration of information flow, thereby influencing new forms of power, collaboration, and inequality. Unlike previous technological revolutions, digital transformation has blurred the boundaries between producers and consumers of information, allowing users to act simultaneously as both content creators and recipients. Online platforms have become social and economic ecosystems where interaction drives innovation, knowledge exchange, and social identity formation. Such dynamics demonstrate that the internet is not merely a communication medium but an engine of social evolution, fostering inclusivity while also creating new digital divides [8].

The rapid adoption of online platforms has accompanied this transformation, reflecting a dramatic increase in global internet usage. As of 2022, global internet users surpassed 5 billion, marking one of the fastest technological expansions in human history [6]. Mobile devices account for the majority of internet access, driven by widespread smartphone adoption and increasing affordability of data plans. Social media platforms—particularly Facebook, Instagram, and YouTube—have become central to this growth, integrating communication, entertainment, and commerce in ways previously unimaginable. This expansion signifies the convergence of technology, mobility, and social engagement, forming the backbone of today's digital ecosystem [8]. The digital transformation has generated numerous positive outcomes, particularly in enhancing access to information, education, and economic participation. The internet democratizes knowledge by providing free access to digital resources that support self-learning, skills development, and professional growth [9]. Online platforms have enabled small businesses to access broader markets, encouraging innovation and entrepreneurship [10]. Moreover, e-learning initiatives have broken traditional educational barriers, allowing learners from different socio-economic backgrounds to pursue academic and vocational programs remotely [9]. These benefits illustrate how digital transformation fosters inclusion and capacity-building across global communities. However, this rapid technological advancement is not without challenges. The very features that promote accessibility also risk amplifying inequalities for those lacking digital literacy or infrastructure. While the internet provides opportunities for empowerment, it can simultaneously perpetuate socio-economic disparities when digital access remains unevenly distributed. As societies increasingly depend on digital technologies, the challenge lies in ensuring equitable access and responsible use. Thus, understanding the dual nature of internet and social media development becomes crucial to maximizing its benefits while mitigating its risks in the digital era [6].

2.2. Behavioral and Psychological Dimensions of Social Media Use

Social media has introduced profound psychological and behavioral changes, shaping how individuals form habits, perceive themselves, and engage with others. Classical theories of habit formation, such as those articulated by William James and later expanded by behaviorists, describe habits as learned behaviors developed through repeated actions under specific cues and rewards [11]. In the digital era, these theories remain relevant, as repetitive social media use reinforces habitual engagement patterns. Users interact with content continuously, guided by reward mechanisms—likes, shares, and notifications—that stimulate neural responses akin to addictive behaviors [12]. This process fosters dependency and reduces conscious control over screen time, marking the transition from intentional use to automatic habit [13].

Modern research extends this understanding by associating digital habits with emotional gratification and social validation. Social media provides immediate feedback loops that reinforce user engagement, creating cycles of expectation and reward similar to behavioral conditioning [12]. Users often seek affirmation, belonging, or distraction, turning platforms into sources of emotional regulation. Over time, these dynamics blur the boundary between voluntary and compulsive use. Research emphasizes that such behavioral reinforcement contributes to digital addiction, where individuals persistently engage in online activities despite awareness of negative outcomes, such as reduced productivity or psychological distress.

Duration, motivation, and engagement type play key roles in determining whether social media use remains healthy or becomes problematic. Individuals motivated by professional networking or learning may experience constructive engagement, whereas those using social media primarily for entertainment or social validation are more susceptible to habitual overuse. Studies indicate that extended screen time often correlates with decreased attention span, disrupted sleep patterns, and heightened anxiety levels [14]. The constant accessibility of social media via mobile devices intensifies these effects, as users find it increasingly difficult to disconnect, even temporarily.

The link between usage intensity and the desire to reduce screen time highlights growing user awareness of overconsumption. Despite recognizing the need for balance, many users experience cognitive dissonance when attempting to limit usage—a phenomenon driven by habit loops that are deeply entrenched in daily life. Feelings of guilt or anxiety upon disengagement demonstrate the psychological cost of continuous connectivity. Moreover, excessive use often leads to emotional exhaustion, loneliness, and fear of missing out (FOMO), which further perpetuate dependence on social media as a coping mechanism.

2.3. Social and Ethical Impacts of Social Media

The social and ethical implications of social media extend beyond individual behavior, influencing communication patterns, cultural norms, and societal values. The literature consistently highlights that social media redefines social interaction by collapsing physical boundaries and enabling instant communication. However, this connectivity also fosters issues related to privacy, misinformation, and digital dependency [15], [16]. While the platforms empower individuals to express opinions and mobilize collective action, they also heighten exposure to data misuse and online manipulation. This duality positions social media as both an enabler of empowerment and a catalyst for new forms of vulnerability [7].

Privacy concerns represent one of the most pressing ethical challenges in digital societies. The commodification of personal data has raised significant questions about user consent, algorithmic transparency, and surveillance. Studies indicate that users often trade privacy for convenience, unknowingly providing vast amounts of personal information to corporations and third parties [17]. These practices blur ethical boundaries and challenge traditional notions of autonomy and trust. Consequently, there is an increasing demand for stronger digital literacy initiatives and policy frameworks that protect users from exploitation [17].

3. Method

3.1 Research Approach and Design

This study employed a quantitative research approach with a descriptive survey design to provide a statistical overview of social media usage habits and their perceived impacts among internet users. The quantitative design was chosen to capture measurable data that reflect behavioral patterns, demographic variations, and user perceptions in a structured manner. This approach allows for numerical representation of complex social phenomena—specifically, the extent, purpose, and consequences of social media engagement—while maintaining objectivity and replicability. The descriptive survey design, in particular, is suitable for mapping relationships among observed variables without manipulating any conditions, thereby aligning with the study's exploratory nature. Data analysis focused on summarizing the characteristics of respondents, visualizing patterns, and examining relationships between key indicators such as screen time, platform preferences, privacy concerns, and intentions to reduce social media use. Because the data were collected cross-sectionally from a large sample, the analysis emphasized general patterns and correlations rather than causal inference.

3.2 Data Source, Sample, and Inclusion Criteria

The study utilized secondary data obtained from a publicly accessible online dataset entitled “*Social Media Usage Survey*”, hosted on the Kaggle platform. The dataset comprised responses from 999 participants who voluntarily completed an online questionnaire about their social media usage habits. The use of secondary data was appropriate for this research due to its large sample size, structured variable set, and broad representation of global internet users. Each record represented one unique respondent, containing demographic attributes and behavioral indicators related to social media engagement. To ensure analytical consistency, only records that contained valid entries for key variables—age group, gender, daily screen time, and desire to reduce social media use—were included in the analysis. Records that lacked responses for these essential variables were excluded through a listwise deletion process. Since the dataset was collected online, it represents a form of convenience sampling; therefore, the results should be interpreted as indicative of patterns within the dataset rather than as representative of a particular population or region.

3.3 Variables, Constructs, and Research Focus

The dataset included a range of variables relevant to demographic characteristics, behavioral tendencies, and attitudinal perceptions. Demographic variables encompassed *age group* (categorized as 0–18, 19–30, and 31–50 years) and *gender* (female, male, and other). Behavioral indicators described user interaction with social media platforms and included variables such as *most used platform*, *primary purpose of use*, and *preferred content type*. These reflected how users engaged with digital spaces for activities such as entertainment, information seeking, or business-related communication. Usage intensity was represented by the variable *Daily Screen Time (hours)*, which was transformed into a numeric measure labeled *Screen_Time_Hours*. The transformation allowed for meaningful statistical

computation, ensuring that continuous data could be used to explore correlations and visual trends. Furthermore, the dataset incorporated perception-based variables such as *Influence on Purchasing Decisions*, *Level of Privacy Concern*, and *Desire to Reduce Social Media Usage*. Together, these variables captured both behavioral and attitudinal dimensions of social media interaction. The study specifically focused on seven analytical objectives: (1) identifying the demographic distribution of users; (2) analyzing platform preferences, usage purposes, and content types; (3) calculating the average daily screen time; (4) exploring perceptions regarding the influence of social media on purchasing behavior; (5) examining users' levels of privacy concern; (6) assessing intentions to reduce social media use; and (7) identifying potential relationships among duration of use, demographic factors, privacy awareness, and behavioral intentions. Collectively, these foci provided a comprehensive quantitative framework to understand the multifaceted nature of social media engagement.

3.4 Data Collection and Preprocessing

Data collection was conducted indirectly through the Kaggle repository, where the dataset was available in Microsoft Excel (.xlsx) format. The file was imported into the Google Colab environment for analysis using the Python programming language. The pandas library was utilized for data importation, manipulation, and structural analysis. Initial inspection involved reading the dataset into a *DataFrame* and conducting schema verification to ensure that variable names and types were consistent with analytical requirements. Data quality checks were performed to identify and handle missing or null values. Records with missing responses on core analytical variables were excluded, while minor inconsistencies—such as stray text entries in numeric columns—were corrected or recoded. A key preprocessing step involved transforming the variable *Daily Screen Time (hours)* from string intervals (e.g., “1–2 hours”) into numeric midpoints, resulting in a new continuous variable, *Screen_Time_Hours*. For instance, ranges such as “<1 hour” were replaced with 0.5, “1–2 hours” with 1.5, and so forth, up to “>5 hours” which was assigned 5.5. This conversion facilitated the calculation of descriptive statistics such as means and standard deviations. Variable names were standardized for consistency and accessibility in the code, for example, “Most Used Platform” was renamed to *Most_Used_Platform*. Categorical variables were recoded into ordered types when necessary—for example, *Privacy Concern* was encoded as *Low < Medium < High*, and *Reduce Usage* as *No < Maybe < Yes*—to support rank-based analyses. Outlier detection was conducted visually through histograms and boxplots; however, no extreme or erroneous values were found, so no data were removed or winsorized.

3.5 Software Environment and Analytical Tools

All data analyses were executed using Python 3 within Google Colab, an environment that supports interactive coding and reproducibility. Three major libraries were employed: pandas for data manipulation and cleaning, matplotlib and seaborn for data visualization, and scipy.stats for exploratory statistical testing. The choice of these libraries was based on their reliability and flexibility for handling structured survey data. The visualization libraries were specifically chosen to generate interpretable graphical representations, including bar plots, histograms, count plots, and boxplots. To ensure reproducibility, all scripts included explicit seed settings and version control annotations for the libraries used. Data and results were saved in structured directories within the Colab workspace, ensuring traceability from raw data to final outputs. No additional machine learning or advanced modeling libraries were employed, as the study's purpose was primarily descriptive and exploratory rather than predictive.

3.6 Analysis Plan

The analysis procedure was structured into two tiers: descriptive analysis and exploratory relational analysis. Descriptive statistics were computed to summarize distributions and identify general behavioral patterns. For categorical variables such as *Gender*, *Age Group*, and *Most Used Platform*, frequency counts and percentages were calculated using the `value_counts(normalize=True)` function. Continuous variables such as *Screen_Time_Hours* were summarized using measures of central tendency (mean, median) and dispersion (standard deviation, range, and quartiles) via the `describe()` function. Graphical visualizations were produced to enhance interpretability, including bar charts for categorical comparisons, histograms to represent the overall screen-time distribution, and boxplots to

compare numeric variables across categories such as *Reduce Usage* or *Primary Purpose*. The second analytical tier focused on exploring relationships among variables. Crosstabulation tables (pd.crosstab) were used to observe associations between categorical variables, such as *Age Group* and *Most Used Platform*, or *Privacy Concern* and *Reduce Usage*. For relationships involving numerical data, boxplots and grouped summary statistics were generated to visualize differences in screen time across multiple categories. Where appropriate, non-parametric statistical tests—specifically Chi-square tests of independence for categorical associations and Kruskal–Wallis H-tests for continuous group comparisons—were employed to validate observable trends. Correlations between ordinal variables such as *Privacy Concern* and *Reduce Usage* were further explored using Spearman’s rank correlation (ρ). The focus of interpretation remained on pattern identification and effect direction rather than formal hypothesis testing, given the exploratory nature of the study.

3.7 Handling Missing Data and Robustness Checks

Missing data were evaluated for each variable using frequency tables and visual inspection. Since the dataset showed minimal missingness (less than 5% in all core variables), the analysis adopted a listwise deletion strategy, meaning that any observation missing data for a given analysis was excluded only from that computation. This ensured that sample sizes varied slightly across analyses but prevented the introduction of artificial values through imputation. To verify that missing data did not bias the results, robustness checks were conducted by comparing the descriptive distributions of complete-case subsets against the full dataset. The similarities between these distributions confirmed that the exclusion of incomplete responses did not alter key trends or relationships.

3.8 Measurement Considerations and Analytical Assumptions

All measures in the dataset were self-reported, which introduces potential biases such as social desirability and recall inaccuracies. For instance, respondents may have under- or over-estimated their daily screen time. The numeric transformation of categorical time ranges into midpoints assumes a uniform distribution of actual use within each range, which, although a simplification, allows for meaningful comparison across respondents. Ordinal variables such as *Privacy Concern* and *Reduce Usage* were treated as ordered but not interval-scaled, ensuring that rank-based nonparametric tests were appropriate. Since the dataset was cross-sectional, causality could not be inferred. Instead, the findings are interpreted as descriptive and correlational, offering insight into associations rather than temporal effects. No assumptions of normality or homoscedasticity were imposed on the data, and the analysis prioritized visual interpretation over inferential generalization.

3.9 Ethical Considerations

Ethical integrity was maintained throughout the research process. The dataset used in this study was publicly available and fully anonymized before access, containing no personally identifiable information. As such, this study qualified as non-human-subjects research, exempt from institutional review. The researchers adhered to Kaggle’s terms of use and data licensing agreements to ensure ethical compliance. All analyses were conducted responsibly, with results reported in aggregate form to prevent any potential identification of respondents. Furthermore, interpretations were framed to respect data limitations, avoiding overstated conclusions or generalizations beyond the scope of the dataset.

3.10 Reproducibility and Data Availability

Reproducibility is a central principle of this study’s design. Every step of the analytical workflow—from data import and cleaning to visualization and summary computation—was documented in a Python script executed in Google Colab. The workflow was deterministic, meaning that identical results can be reproduced by running the same script under the specified environment. Variable names, code segments, and transformation rules were annotated for clarity and transparency. The original dataset, titled “*Social Media Usage Survey*”, remains publicly accessible on the Kaggle platform, and a minimal version of the processing script can be provided upon request for academic or educational use.

This ensures that the analytical procedures described herein can be independently verified, extending the study's contribution to open and transparent computational research.

4. Results and Discussion

4.1 Demographic Overview of Respondents

The survey involved 999 respondents, producing a balanced demographic composition across both age and gender categories. The age distribution was nearly proportional, with respondents aged 0–18 years comprising 33.93 %, those aged 19–30 years comprising 33.43 %, and those aged 31–50 years comprising 32.63 % of the total sample. This even segmentation indicates that the dataset successfully represents cross-generational social media users, allowing for meaningful comparison of habits between younger and older cohorts. Gender representation was likewise balanced: 34.33 % female, 32.93 % male, and 32.73 % identifying as other (Figure 1). Such demographic equilibrium minimizes bias toward any single group and provides a solid foundation for analyzing variations in digital behavior and preferences.

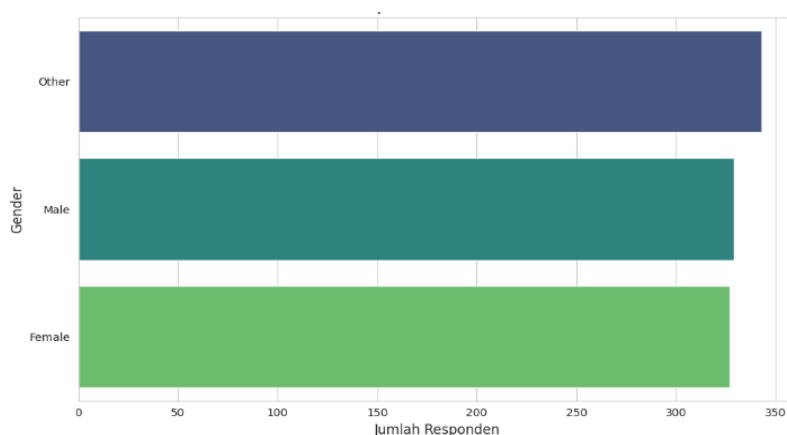


Figure 1. Gender Distribution

4.2 Habitual Patterns of Social Media Use

The analysis of platform preferences revealed three dominant social media sites—Instagram (35.94 %), Facebook (33.93 %), and Twitter/X (30.13 %), as shown in Figure 2. These results highlight the enduring prominence of image- and conversation-based platforms that facilitate both visual interaction and information sharing. Instagram's leadership reflects the global shift toward visually rich content and rapid engagement, while Facebook's continued relevance indicates its role as a multipurpose networking hub. Twitter's presence underscores users' sustained interest in concise, real-time communication.

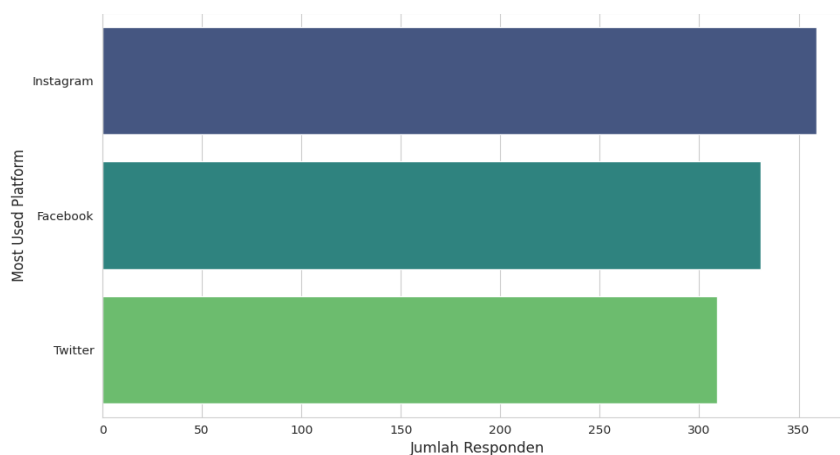


Figure 2. Platform Distribution

Respondents reported diverse motivations for social media engagement, demonstrating that these platforms function as multifaceted environments. The three main purposes were news consumption (34.63 %), entertainment (32.63 %), and business-related use (32.73 %). This nearly equal distribution confirms that social media simultaneously serves informational, recreational, and economic needs. When examining preferred content, video formats dominated, attracting the highest proportion of respondents (around 340). Articles and images followed closely, each preferred by roughly 320 participants. The strong appeal of video corresponds with global media-consumption trends that favor audiovisual engagement; however, the sustained interest in text and static visuals suggests users still seek depth and reflection beyond short-form entertainment. These patterns illustrate how media diversity continues to shape attention and learning behaviors in online settings.

4.3 Duration, Impact, and Relationship Analyses

The average daily screen time among respondents was 3.50 hours, with a standard deviation of 1.62 hours, a minimum of 0.5 hours, and a maximum of 5.5 hours. The quartile values ($Q1 = 2.5$, median = 3.5, $Q3 = 4.5$ hours) indicate considerable variability. The histogram revealed a bimodal pattern, with peaks near 2.5 and 4.5 hours, distinguishing moderate from intensive users. This suggests two behavioral clusters—individuals integrating social media casually into daily life and those for whom it constitutes a dominant routine. An average of $3\frac{1}{2}$ hours per day demonstrates the pervasive role of digital interaction in modern lifestyles. Social media's persuasive capacity was evident: 34.63 % of respondents acknowledged that online platforms directly influence their purchase decisions, another 34.63 % reported “sometimes,” and only 30.74 % claimed no influence (Figure 3). Combining the affirmative categories indicates that nearly two-thirds ($\approx 69\%$) of users perceive at least some purchasing impact from social media exposure. This supports existing literature emphasizing the growing importance of social networks as marketing channels and social proof mechanisms in consumer behavior.

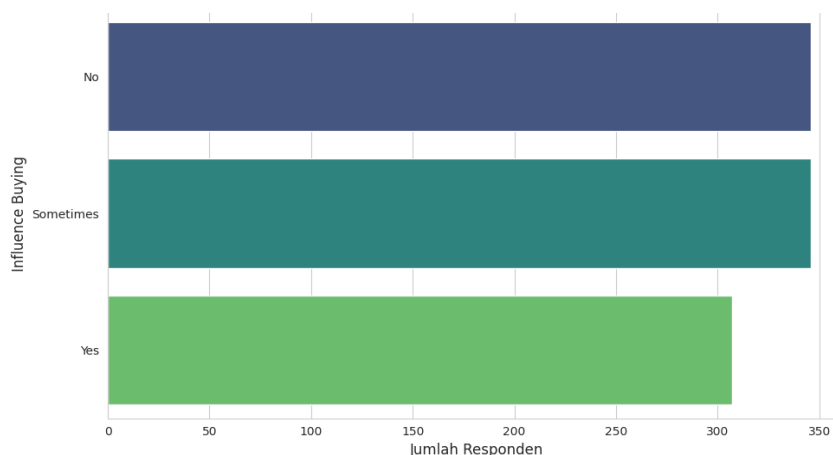


Figure 3. Influence Buying Distribution

Concerns over digital privacy were distributed fairly evenly across categories: 34.93 % low, 34.63 % medium, and 30.43 % high. Despite the lower proportion of highly concerned users, approximately 65 % demonstrated at least moderate awareness of privacy issues. A notable majority of respondents expressed some inclination to decrease their time online. 34.74 % definitively wanted to reduce their use, 33.54 % said “maybe,” and 31.73 % had no intention to do so. When grouped, about 68 % indicated at least a partial desire for reduction, highlighting growing self-awareness regarding digital balance and possible overuse. This behavioral insight mirrors the increasing recognition of “digital well-being” as a personal and social concern. Box-plot analysis revealed that participants intending to reduce usage generally had higher median screen-time values than those who reported no desire to change. This pattern demonstrates a positive association between higher exposure and the perceived need for self-regulation. Comparative analysis across age categories showed discernible differences in platform choice. Younger respondents (0–18 and 19–30 years) exhibited greater affinity for visually driven platforms such as Instagram and TikTok, while older participants (31–50 years) tended to prefer Facebook and WhatsApp for interpersonal communication and information exchange (Figure 4). This generational divergence reflects broader technological socialization processes and confirms that age remains a central determinant in digital-media preference.

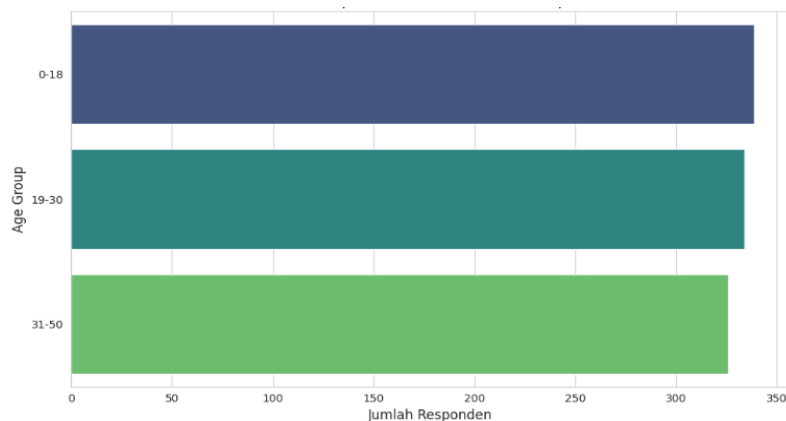


Figure 4. Age Group Distribution

Examining the relationship between primary purpose and screen time revealed that respondents using social media for entertainment displayed higher average screen times compared to those using it for news or business, as shown in Figure 5. Entertainment-oriented users often engage with immersive and continuous content, which naturally extends their daily usage. This observation supports existing behavioral findings that hedonic motivations foster prolonged digital engagement relative to utilitarian or informational motives.

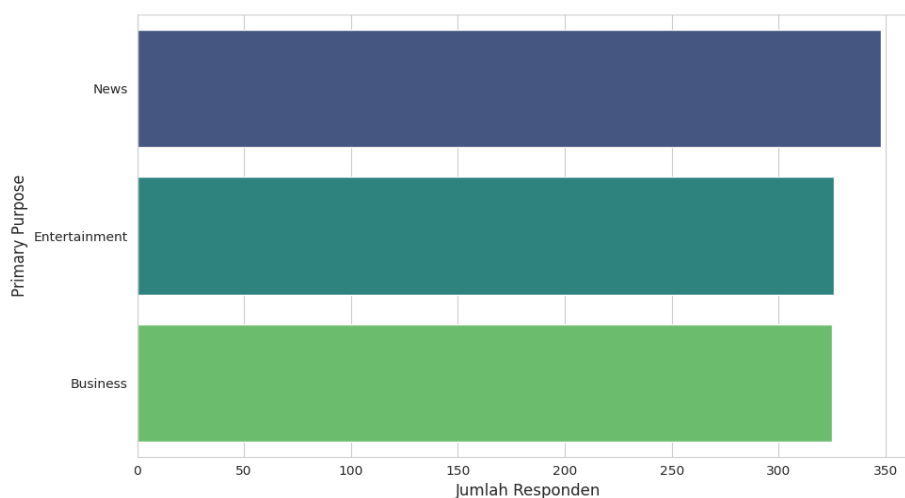


Figure 5. Primary Purpose Distribution

Further analysis indicated that individuals with higher levels of privacy concern were more likely to express a desire to reduce social-media activity. Users reporting “high” concern categories showed greater proportions of “yes” or “maybe” responses when asked about reducing usage, suggesting a link between perceived privacy risk and behavioral restraint. This trend supports the idea that awareness of digital vulnerability encourages moderation and selective participation online. Comparing screen-time duration across major platforms revealed variations consistent with platform design. Respondents who primarily used Instagram or TikTok exhibited higher median screen-time hours than those favoring Facebook or Twitter. The visually dynamic and algorithm-driven nature of short-video platforms likely contributes to deeper engagement loops. Conversely, text-based or communication-focused platforms elicited shorter, more intermittent use, aligning with theories of content immersion and attention economy behavior. Analysis of content-type preference showed that users who favored video content spent more time online than those who preferred articles or images. This difference can be attributed to the time-intensive nature of audiovisual consumption and the continuous-play features embedded in most video platforms. The results confirm global trends in digital consumption patterns, where video has emerged as the dominant and most time-engaging medium across demographics.

4.4 Discussion

The findings collectively illustrate the multifaceted nature of social media engagement, encompassing informational, emotional, and behavioral dimensions. The balanced demographic profile enhances the reliability of observed patterns, confirming that social-media use transcends generational and gender boundaries. However, distinctions in purpose and platform preference indicate that while digital connectivity is universal, its expression varies across age and motivation. The coexistence of benefits—such as communication efficiency and access to information—with risks—such as dependency and privacy loss—reflects the dual role of social media in modern life. Average usage levels of more than three hours per day underscore how deeply social networking has become embedded in daily routines. Yet the strong proportion of users expressing a wish to limit their engagement demonstrates growing awareness of digital fatigue and self-regulation needs. The correlations between longer screen time, privacy anxiety, and intention to reduce usage provide evidence that users are becoming more conscious of the trade-off between connectivity and well-being. Its effectiveness as a marketing and communication tool is undeniable, yet it also demands greater attention to digital literacy, privacy management, and healthy usage patterns. Consequently, these findings provide valuable empirical evidence to guide educators, policymakers, and health practitioners in developing targeted digital-well-being programs and awareness initiatives that encourage more responsible participation in online environments.

5. Conclusion

Based on a quantitative analysis of 999 participants from the social media utilization survey, the study revealed key patterns in usage habits and their influence. Facebook Instagram social Media has been so integrated into the lives of users around the world, characterized by the dominant presence of well-known platforms such as Instagram, Facebook, and Twitter in various age groups, as well as varied purposes of use ranging from information, entertainment, to productivity, which shows its diverse functions. The high desire for video content also confirms the change in media consumption. On the other hand, social media is proven to have a significant impact on consumers' shopping choices, making it a crucial channel in a digital marketing plan. Privacy concerns are also a common concern among users, reflecting awareness of the risks of personal data. Interestingly, the main results show that intentions to reduce social media use do not necessarily increase in line with high privacy anxiety; in contrast, the group with intermediate levels of anxiety had the strongest urge to want to reduce use, emphasizing the complexity of addictive behaviors as well as self-awareness in the utilization of technology. Finally, the high average daily screen time and the great desire among users to reduce social media usage time confirms the importance of encouraging digital time management and a healthy balance between online and offline interactions.

6. Declarations

6.1. Author Contributions

Author Contributions: Conceptualization, T.Y.P., H., and C.H.; Methodology, T.Y.P. and H.; Software, C.H. and H.; Validation, H. and T.Y.P.; Formal Analysis, T.Y.P.; Investigation, C.H. and H.; Resources, H. and T.Y.P.; Data Curation, C.H.; Writing—Original Draft Preparation, T.Y.P.; Writing—Review and Editing, H. and C.H.; Visualization, H. All authors have read and agreed to the published version of the manuscript.

6.2. Data Availability Statement

The data presented in this study are available on request from the corresponding author.

6.3. Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

6.4. Institutional Review Board Statement

Not applicable.

6.5. Informed Consent Statement

Not applicable.

6.6. Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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