



## Introversion and Passive Social Media Engagement Among Generation Z College Students: A Descriptive–Correlational Study

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### Abstract

This study examined the relationship between introversion and social media usage patterns among Generation Z college students at First City Providential College. Using a quantitative descriptive–correlational design, data were gathered from 82 Generation Z students through a structured, self-administered questionnaire assessing introversion-related tendencies and social media usage behaviors. Descriptive statistics were used to summarize key patterns of engagement, while Pearson’s correlation was applied to test the association between introversion and usage patterns. Findings indicate that respondents generally displayed moderate to high introversion-related tendencies, particularly in preferences for small-group interaction, avoidance of overwhelming social situations, and the use of social media for emotional regulation, preparation, and recovery. Social media engagement was characterized by frequent checking and extended daily use, with respondents primarily demonstrating passive consumption behavior (e.g., watching or scrolling) rather than active posting or commenting. Correlational analysis revealed a strong and statistically significant positive relationship between introversion and social media usage patterns ( $r = 0.958, p < .001$ ), suggesting that higher introversion is associated with stronger reliance on social media as a controlled and emotionally supportive environment for communication and self-regulation. On the basis of these results, the study proposes BALANCE: A Social Media Wellness and Engagement Program to promote mindful and developmentally balanced social media use, reduce reliance on social media as a primary coping mechanism, and support the well-being and social adjustment of introverted Generation Z students. Overall, the findings underscore the value of personality-sensitive approaches in understanding digital behavior and designing student-centered interventions for healthier social media engagement.

**Keywords:** *introversion; passive social media use; Generation Z; college students; digital behavior; digital well-being; personality-sensitive intervention*

### 1. Introduction

Social media has become a defining infrastructure of contemporary social life, particularly among young adults who have grown up with ubiquitous access to networked platforms. For Generation Z—often characterized as “digital natives”—online spaces such as Facebook, Instagram, X (formerly Twitter), TikTok, and YouTube function not merely as leisure tools but as routine environments for communication, entertainment, identity expression, and belonging (Dimock, 2019; Valkenburg et al., 2022). Because these platforms blend interpersonal connection with algorithmic content delivery, they shape how students interact with peers, curate public and private identities, and manage daily emotional experiences. In college settings, where students navigate developmental transitions such as identity formation, shifting peer networks, and increased academic demands, social media behavior may be particularly salient in understanding both social adaptation and well-being (Twenge, 2017).

While social media is frequently discussed as a vehicle for expanded connectivity, digital engagement is not uniform across individuals. Personality traits influence how students select platforms, manage interaction intensity, and interpret online feedback. Introversion, in particular, has been associated with preferences for lower-stimulation environments, reflective processing, and selective social engagement. These tendencies may translate into distinctive online patterns, such as greater reliance on asynchronous communication, controlled self-presentation, and the strategic use of mediated interaction to regulate social demands (Amichai-Hamburger & Vinitzky, 2010; Cain, 2012). From a behavioral perspective, social media may provide introverted students with perceived advantages: interaction can be paced, messages can be refined before sending, and participation can remain largely observational rather than performative. Such features may reduce the immediate pressure of face-to-face encounters while still enabling access to information, community membership, and social connection.



At the same time, the relationship between introversion and social media use warrants careful empirical attention, particularly in student populations. Prior work suggests that online interaction can serve as a form of social compensation and emotional support, allowing individuals to engage in ways that feel psychologically safer or less demanding than offline interaction (Orr et al., 2009; Valkenburg et al., 2022). However, concerns have also been raised that heavy reliance on online environments—especially when dominated by passive consumption or avoidance of offline engagement—may contribute to patterns of withdrawal, reduced practice of face-to-face social skills, and heightened vulnerability to negative affect when online experiences become emotionally central (Przybylski et al., 2013; Twenge, 2017). These contrasting perspectives point to the importance of examining not only the amount of social media use but also the pattern and purpose of use, particularly among students whose personality profiles may shape their motivations and preferred modes of engagement.

Within this context, the present study examines the relationship between introversion and social media usage patterns among Generation Z college students at First City Providential College. The study focuses on how personality may be associated with digital behavior in terms of daily use, frequency, engagement style, and functional purposes (e.g., entertainment, information seeking, communication, and self-expression). By narrowing the inquiry to these two core variables, the research contributes to a more nuanced understanding of digital engagement among college students and offers a basis for developing context-sensitive guidance for healthier and more intentional social media use. Consistent with descriptive–correlational research, the study does not claim causal effects; instead, it investigates the degree to which introversion is statistically associated with observable self-reported patterns of social media behavior (Amichai-Hamburger & Vinitzky, 2010; Seidman, 2013).

This study examines the relationship between introversion-related tendencies and social media usage patterns among Generation Z college students at First City Providential College. Specifically, it (1) describes students' social media engagement profile in terms of daily duration of use, preferred platforms, checking frequency, dominant activity, and time-of-day use; (2) summarizes the central tendencies of the introversion-related indicators reported by the respondents; and (3) tests the statistical association between the composite

introversion score and the composite social media usage patterns score.

Given the descriptive–correlational design and single-source self-report measurement, findings are interpreted as statistical associations rather than causal effects.

## 2. Review of Related Literature

### 2.1 Social Media Use Among Generation Z College Students

Generation Z is widely described as a cohort whose social development has unfolded alongside pervasive digital media, making social networking platforms central to communication, entertainment, identity expression, and social belonging. In contemporary accounts of generational boundaries, Generation Z is positioned as the first cohort to grow up with near-continuous access to networked technologies, which helps explain why social media is often treated less as an optional tool and more as an everyday social environment (Dimock, 2019). Within this context, syntheses of evidence on youth and adolescent social media use emphasize that online engagement can shape psychosocial experiences in multiple directions—supporting connection and access to social resources while also introducing risks that may vary across users and usage styles (Valkenburg et al., 2022). Complementing this view, broad cultural analyses of “iGen” highlight how the intensity and pervasiveness of digital life distinguishes Generation Z's developmental experience from earlier cohorts, with implications for social habits, well-being, and preparedness for adult roles (Twenge, 2017).

Within Generation Z samples, an important recurring distinction in the literature is not merely how much social media is used, but how it is used—particularly the contrast between active engagement (e.g., posting, commenting, initiating interactions) and passive engagement (e.g., browsing, scrolling, consuming content). Research summarized in the provided materials indicates that personality-linked patterns often map onto this distinction: extraversion tends to align with more active forms of participation, whereas introversion is more commonly associated with passive consumption patterns such as browsing and scrolling (Moisescu et al., 2025; Mancinelli et al., 2019). At the same time, the literature also recognizes nuance in these relationships. Introverted users may not be disengaged; rather, their participation may be less visible, shaped by preferences for controlled

interaction or by anxiety-related responses to the social demands of online self-presentation (Wang et al., 2025). Further, some evidence suggests that social media use itself can temporarily influence self-perceptions of extraversion, complicating a simple one-way interpretation of personality predicting usage style (Dowling et al., 2024). In addition, passive patterns may be embedded within compensatory use, where individuals who experience offline social discomfort gravitate toward online environments for coping or support, a mechanism reflected in research on compensatory social networking use among college populations (Zhou et al., 2020).

## **2.2 Frequency and Duration of Social Media Use Among Introverted and Extraverted Students**

The literature is less consistent when the focus shifts from engagement style to the more quantitative indicators of social media use, such as checking frequency and time spent online. Some personality-focused studies suggest that introversion (or lower extraversion) may be implicated in patterns of problematic social media use, which can manifest as excessive checking, high salience of platforms in daily routines, and difficulty disengaging from online activity (Kircaburun et al., 2018).

This perspective aligns with broader discussions that emphasize how the affordances of social networking sites—particularly the ability to regulate interaction and obtain low-effort social stimulation—may inadvertently support overuse when digital interaction becomes a substitute for offline connection (Andreassen et al., 2017; Kuss & Griffiths, 2017).

However, other findings complicate a direct claim that introversion reliably predicts greater time spent or more frequent checking. Evidence from emerging adult samples indicates that “use frequency” and “engagement” may represent distinct constructs, such that time spent online does not necessarily map cleanly onto personality traits like extraversion or introversion (Scott et al., 2017).

Complementing this, research using more objective indicators of social media behavior (e.g., measured screen time) has reported no significant correlations between extraversion/introversion and time spent on social media applications (Cordaro, 2023).

Beyond frequency and duration, some evidence suggests that social media use may not extend predictively to major offline decisions in the educational context. Espelita and Atento (2025), in examining a feeder-school ecosystem as a basis for a consumer-centered marketing framework,

reported no clear connection between social media use and consequential decisions such as school choice, indicating that high or frequent use does not necessarily translate into decision-relevant influence in institutional selection processes.

Taken together, these studies indicate that while introversion may relate to motivations and problematic patterns, it does not uniformly translate into higher usage duration or checking frequency across all college-age or Gen Z samples (Kircaburun et al., 2018; Scott et al., 2017; Cordaro, 2023).

A more integrative interpretation is that introversion may be associated less with “more time overall” and more with how time is allocated within platforms. For example, evidence has been summarized indicating that introversion is negatively associated with posting frequency but positively associated with time spent browsing, implying that introverted individuals may spend comparable time online—yet in less visible, more observational modes of participation (Seidman, 2013).

This distinction matters because time-based measures can obscure meaningful behavioral differences: two students may report similar hours of use, yet one may spend that time actively interacting while the other primarily consumes content passively. Consequently, mixed evidence on duration and frequency underscores the methodological need to examine usage patterns—such as passive versus active engagement, purposes of use, and automatic checking—alongside raw time indicators to clarify how personality-related tendencies manifest in digital contexts. Importantly, these divergent usage styles have different implications for academic outcomes and digital literacy: active engagement often correlates with better self-regulation and more productive technology use, whereas passive consumption tends to fragment attention and erode academic discipline, particularly among individuals with weaker digital skills (Atento et al., 2025).

## **2.3 Social Compensation Versus the Rich-Get-Richer Hypothesis in College Social Media Use**

Two competing explanations frequently appear in the literature when interpreting why certain students may be more psychologically reliant on social media. The social compensation hypothesis proposes that students who experience offline social discomfort—often linked to introversion, social anxiety, or internalizing symptoms—may use social media as a compensatory space to reduce interpersonal pressure while still accessing connection and support. In the manuscript, this compensatory logic is reflected in the argument that social media affords regulated interaction through asynchronous communication



and controlled self-presentation, allowing introverted individuals to maintain social presence with reduced social demands; it is further suggested that these features can help manage shyness, social anxiety, and communication apprehension (Seidman, 2013; Gosling et al., 2011; Orr et al., 2009).

Consistent with this view, the related literature compiled for the study indicates that evidence tends to favor social compensation among socially vulnerable college populations. For instance, international students with high internalizing symptoms (including anxiety) were reported to exhibit the highest levels of social media engagement, a pattern interpreted as consistent with compensatory use (Chen et al., 2022).

Longitudinal evidence among college freshmen also supports this mechanism: introversion was found to predict compensatory social networking site use, and this compensatory pathway was associated with increased depression over time, suggesting that social media may function as a coping route for socially vulnerable students, but not necessarily without costs (Zhou et al., 2020).

Additional studies likewise emphasize that socially anxious or introverted individuals may turn to social media to seek social support or reduce anxiety, aligning with the core claim of social compensation (Lyvers et al., 2020; Winstone et al., 2021).

In contrast, the rich-get-richer hypothesis proposes that socially skilled individuals—often more extraverted—derive disproportionate benefits from online platforms because they can convert active online communication into stronger networks and greater social capital. The compiled literature notes that some evidence supports this perspective, particularly findings that extraverts may accumulate more social capital through active online interaction, implying that online environments may amplify existing social advantages for those already socially comfortable (Weiqin et al., 2016).

Importantly, the same literature also suggests that these hypotheses need not be mutually exclusive; both mechanisms may operate depending on the user's psychological profile and social context, with social compensation appearing more prominent among introverted or socially anxious students, while rich-get-richer patterns may be more salient among socially skilled, highly interactive users (Chen et al., 2022; Zhou et al., 2020; Lyvers et al., 2020; Weiqin et al., 2016; Winstone et al., 2021).

#### ***2.4 Passive Versus Active Social Media Use and Its Links to Well-Being and Academic-Related Outcomes***

A recurring distinction in contemporary research is between active social media use (e.g., posting, commenting, direct interaction) and passive social media use (e.g., scrolling, browsing, observing others' content). This distinction is important because passive patterns are more consistently associated with poorer well-being outcomes than active engagement. Evidence summarized in recent studies indicates that passive social media use among college students is linked to increased depressive symptoms and lower subjective well-being, with proposed pathways including fear of missing out (FoMO) and social comparison processes (Delo, 2025; Jiao et al., 2025; Liu & Xiao, 2024).

This pattern is conceptually consistent with the broader argument that passive browsing increases exposure to curated, idealized content without the balancing effects of reciprocal interaction, thereby heightening vulnerability to negative affect (Valkenburg et al., 2022).

In contrast, active use is often framed as more socially purposive—motivated by connection and interaction—and is therefore discussed as having a potentially more adaptive association with well-being; however, the same line of evidence notes that when passive use is driven by boredom or FoMO, the predicted well-being outcomes tend to be less favorable (Seidman et al., 2025; Liu & Xiao, 2024).

Parallel concerns appear in the academic domain. Recent studies summarized in the provided materials link excessive and/or passive social media use to distraction, poorer concentration, and learning burnout, which in turn relate to lower academic engagement and performance (Sikarwar & Agrawal, 2025; Ma et al., 2025; Gong et al., 2025).

In particular, the mechanisms discussed include emotionally and cognitively taxing experiences that may accompany heavy engagement, such as FoMO and social anxiety, which can operate as mediating pathways between social media behavior and academic outcomes (Gong et al., 2025).

While the literature does not reduce the relationship to a simple “social media harms academic performance” claim, it suggests that the type of use matters: passive engagement appears more consistently associated with negative academic-related outcomes than active engagement,

and active use may sometimes become problematic when it co-occurs with high passive use (Cheng et al., 2023; Ma et al., 2025; Delo, 2025; Jiao et al., 2025; Liu & Xiao, 2024).

### **2.5 The Double-Edged Character of Social Media for Introverted College Students**

The literature consistently portrays social media as a potentially adaptive environment for introverted individuals because it allows interaction to be regulated in ways that are difficult to achieve in face-to-face settings. Introversions, commonly situated on the introversion–extraversion continuum within the Five-Factor Model (Costa & McCrae, 1992), is associated with preferences for controlled stimulation and more selective forms of social engagement (Cain, 2012). In online contexts, these preferences align with platform affordances that support asynchronous communication and deliberate response formation (Seidman, 2013), as well as controlled self-presentation and selective self-disclosure via features such as profile customization, selective posting, and private messaging (Gosling et al., 2011). These affordances help explain why social networking sites may be experienced as less socially exhausting than offline interaction for introverted users, and why social media may serve compensatory functions in managing shyness, social anxiety, or communication apprehension (Orr et al., 2009).

At the behavioral level, this regulated interaction is reflected in the tendency for introverted users to adopt less visible engagement patterns. Introverts have been described as more likely to engage passively—spending more time observing content than creating it—while extraverts tend to engage more actively through posting and interacting in larger networks (Ryan & Xenos, 2011; Voorn & Kommers, 2013). Related findings indicate that introversion is negatively associated with posting frequency but positively associated with time spent browsing, implying that introverts may spend substantial time on platforms yet participate in ways that are quieter and more observational (Seidman, 2013).

This pattern is reinforced in the compiled literature, which summarizes that introverts often show passive browsing and scrolling tendencies, sometimes linked to anxiety-related discomfort with more public forms of platform participation (Moisescu et al., 2025; Mancinelli et al., 2019; Wang et al., 2025).

However, the same body of work emphasizes that social media can function as a double-edged environment for introverted students. While low-pressure connection may be beneficial, the cultural emphasis on visibility and posting can be experienced as overwhelming, potentially

contributing to anxiety, withdrawal, or digital fatigue (Cauberghe et al., 2021).

In addition, social comparison processes—commonly intensified by passive browsing—may disproportionately affect introverted users because greater exposure to curated content may occur without the buffering effects of reciprocal interaction, increasing vulnerability to outcomes such as envy, loneliness, or reduced self-esteem (Valkenburg et al., 2022).

This concern aligns with broader discussions that passive social media use is more consistently associated with poorer well-being among college students than active use, in part through social comparison and related mechanisms (Delo, 2025; Jiao et al., 2025; Liu & Xiao, 2024).

The double-edged character of social media for introverts is also evident in the risk that compensatory digital interaction may become a substitute for offline development. Introverted or socially anxious students may use social media to cope with offline social discomfort, consistent with the social compensation hypothesis (Chen et al., 2022; Lyvers et al., 2020; Winstone et al., 2021; Zhou et al., 2020).

Yet longitudinal evidence cautions that compensatory social networking site use can be linked with increased depressive outcomes over time, suggesting that reliance on online spaces may not always yield protective effects (Zhou et al., 2020).

Related conceptual accounts warn that constant connectivity may contribute to overuse when digital interaction displaces offline connection (Andreassen et al., 2017; Kuss & Griffiths, 2017), potentially creating cycles in which online interaction replaces face-to-face social practice and undermines the development of real-world communication skills and emotional resilience (Przybylski et al., 2013). These dynamics are mutually reinforcing: as offline social skills and resilience weaken, individuals may increasingly rely on online environments that deliver brief, rapidly changing visual stimuli, which in turn heighten distractibility and reduce sustained attention. The resulting fragmentation of attention presents significant challenges to academic focus and self-regulation, particularly for students already predisposed to attentional difficulties (Atento et al., 2025), and may further entrench the shift from meaningful, in-person interaction to superficial digital engagement.

### **2.6 Synthesis of Literature**

Across the reviewed studies, social media emerges as a central social environment for

Generation Z, shaping communication, entertainment, identity expression, and perceived belonging (Dimock, 2019; Twenge, 2017; Valkenburg et al., 2022).

This context makes it analytically insufficient to treat “social media use” as a single, uniform behavior. Instead, the literature consistently implies that meaningful explanation requires attention to how students use platforms (engagement style and motivations), why they use them (functional purposes and coping needs), and what outcomes tend to co-occur with different use patterns (well-being and academic-related indicators).

Within this broader digital ecology, personality—particularly the introversion–extraversion dimension—appears most robustly related to differences in engagement style rather than simple volume metrics. The reviewed evidence points to a recurring contrast between active and passive use, wherein extraversion tends to align with more outward, interactive behaviors (e.g., posting, commenting, visible interaction), while introversion is more often associated with quieter patterns such as browsing and scrolling, reflecting preferences for lower-pressure participation (Moiescu et al., 2025; Mancinelli et al., 2019; Wang et al., 2025).

This helps clarify why two students may report similar amounts of time spent online yet exhibit materially different usage profiles: one may be socially expressive and interactive, while another participates primarily through observation and selective engagement.

When the literature shifts toward frequency and duration, findings become more mixed. Some studies associate personality factors (including introversion or lower extraversion) with problematic or motivated patterns of use, yet other work highlights that time spent online and personality do not consistently correlate, especially when more objective indicators (e.g., measured screen time) are used (Kircaburun et al., 2018; Scott et al., 2017; Cordaro, 2023).

In practical terms, this suggests that time-based indicators may be blunt instruments for capturing personality-linked differences; a stronger empirical strategy is to examine patterned usage—engagement style, purposes, and reliance—rather than relying on “hours per day” as the primary explanatory outcome.

Theoretical interpretation of these patterns is frequently organized around two explanatory frames. Evidence summarized in college-age

populations generally supports a social compensation pathway, in which introverted or socially anxious students turn to social media to compensate for offline social discomfort—often to manage anxiety, seek social support, or maintain connection in a more controllable environment (Chen et al., 2022; Zhou et al., 2020; Lyvers et al., 2020; Winstone et al., 2021).

At the same time, the rich-get-richer hypothesis remains relevant, particularly in research suggesting that socially skilled, more extraverted users can accumulate social capital through active online communication (Weiqin et al., 2016).

Taken together, the literature implies that both mechanisms may operate, but the dominant pathway likely varies by individual differences and context: socially vulnerable students may use platforms to reduce interpersonal strain, while socially skilled students may use platforms to amplify existing networks and benefits.

The reviewed outcomes literature further suggests that the quality of social media engagement is consequential. Passive use is more consistently associated with poorer well-being outcomes among college students—particularly depressive symptoms and lower subjective well-being—often discussed alongside mechanisms such as fear of missing out and social comparison (Delo, 2025; Jiao et al., 2025; Liu & Xiao, 2024).

Parallel patterns appear in academic-related outcomes, where excessive or passive use is linked in recent studies to distraction, poorer concentration, and learning burnout, which in turn may undermine engagement and performance (Sikarwar & Agrawal, 2025; Ma et al., 2025; Gong et al., 2025).

This does not imply that all social media use is detrimental; rather, it consolidates the idea that passive, comparison-laden patterns—and reliance-driven use—are more consistently associated with negative correlates than socially purposive, interactive use.

Finally, the literature also cautions against assuming that high social media use automatically translates to strong influence on consequential offline decisions. Evidence within the provided sources notes that social media use may not meaningfully predict major choices such as school selection, underscoring that digital exposure and digital influence are not interchangeable constructs (Espelita & Atento, 2025).

This nuance supports the broader synthesis: social media is pervasive and psychologically significant, but its impacts are likely mediated by usage pattern, motivation, and individual differences rather than by time spent alone.

## 2.7 Gaps in the Literature

Despite a substantial body of work examining social media use among young people, the reviewed literature indicates several persisting gaps that justify further investigation of introversion and social media usage patterns in college settings.

First, while social media is consistently recognized as a central environment for Generation Z, much of the literature emphasizes broad claims about “social media use” without sufficiently distinguishing between use volume (e.g., time spent, frequency of checking) and use style (e.g., passive browsing versus active interaction). The reviewed studies suggest that personality—especially introversion/extraversion—may be more reliably linked to how students engage (active vs passive patterns) than to raw duration metrics, yet empirical findings remain mixed when time-based indicators are treated as the primary outcomes (Kircaburun et al., 2018; Scott et al., 2017; Cordaro, 2023; Moiescu et al., 2025; Mancinelli et al., 2019; Wang et al., 2025). This inconsistency signals a need for studies that operationalize “usage patterns” more precisely and examine multiple behavioral facets in a single design.

Second, the literature reflects ongoing theoretical tension between the social compensation and rich-get-richer hypotheses. Evidence supports compensatory pathways among introverted or socially anxious college populations (Chen et al., 2022; Zhou et al., 2020; Lyvers et al., 2020; Winstone et al., 2021), while other findings remain consistent with accumulation of social capital among more extraverted and socially skilled users (Weiqin et al., 2016). However, the reviewed material suggests that these explanations may operate simultaneously depending on individual and situational factors, and it remains insufficiently clear under what conditions one pathway is more dominant than the other. This leaves a gap for context-specific studies that examine introversion alongside observable engagement patterns to clarify which explanatory frame better fits a particular student population.

Third, while the outcomes literature associates passive use with poorer well-being and academic-related indicators, much of the evidence is discussed at a general level rather than tightly mapped to personality-linked behavioral profiles. The reviewed sources connect passive social media use with depressive symptoms and lower well-being through mechanisms such as fear of missing out and social

comparison (Delo, 2025; Jiao et al., 2025; Liu & Xiao, 2024), and they link excessive use to distraction, reduced concentration, and learning burnout (Sikarwar & Agrawal, 2025; Ma et al., 2025; Gong et al., 2025). Yet the literature set reviewed here does not fully resolve how these outcomes differ for introverted versus extraverted students when engagement style is accounted for. This indicates a need for studies that explicitly integrate personality and engagement mode when interpreting well-being and academic-related correlates.

Fourth, the literature suggests that the influence of social media may be domain-specific, and that heavy use does not automatically translate into influence over major offline decisions. For example, evidence cited in the provided sources indicates that social media use may not meaningfully predict consequential decisions such as school choice (Espelita & Atento, 2025). This highlights a conceptual gap between exposure and impact and supports the need for studies that specify what outcomes are being claimed—behavioral patterns, well-being correlates, academic proxies, or decision-making influence—rather than assuming uniform effects.

Taken together, these gaps support the importance of examining introversion in relation to multiple indicators of social media usage patterns—time, frequency, engagement style, and purposes of use—within a defined college context. Addressing these gaps can contribute to a more precise understanding of how personality differences shape digital behavior among Generation Z students and can inform interventions aimed at healthier and more intentional platform engagement.

## 3. Methodology

### 3.1 Research Design

The study employed a quantitative, descriptive–correlational survey design to examine the statistical relationship between level of introversion and social media usage patterns among Generation Z college students. This design was selected because it allows the variables to be measured as they naturally occur and enables the estimation of association between constructs without manipulating any condition.

### 3.2 Participants, Locale, and Sampling

Participants consisted of 82 Generation Z college students (N = 82) from First City Providential College.

Eligibility criteria reflected the study’s operational definition of Generation Z as individuals



born between 1997 and 2007, currently enrolled in higher education and actively using at least one social media platform.

The sampling approach was convenience sampling, chosen due to accessibility of respondents and time constraints. While appropriate for exploratory correlational work within a defined setting, this sampling approach implies that results should be interpreted as most applicable to the study's sample and context rather than automatically generalized to all Generation Z college students.

### 3.3 Research Instrument

Data were collected using a structured, self-administered questionnaire composed of closed-ended items. The instrument contained two main measurement components: (a) introversion-related indicators and (b) social media usage patterns.

For the scale-based components, responses were recorded using a five-point Likert format ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). In addition, the questionnaire included categorical profile items that captured behavioral descriptors of social media use (e.g., preferred platform, daily duration categories, checking frequency, dominant activity, and time-of-day use), which were summarized using frequency and percentage distributions.

Instrument reliability was examined through Cronbach's alpha, which indicated high internal consistency for the overall scale ( $\alpha = 0.878$ ). Item-level checks suggested only marginal changes in alpha if items were deleted, supporting the coherence of the instrument's components for the study's purpose.

### 3.4 Data Collection Procedure

Following instrument preparation and reliability checking, the survey was administered to the target respondents through an online, group-administered format using Google Forms, allowing efficient distribution and collection of responses within the college context.

After data gathering, responses were encoded for analysis using Jamovi 2.7.15 as statistical software.

### 3.5 Data Analysis

Data analysis proceeded in two stages. First, descriptive statistics were used to summarize respondent profiles and key social media engagement indicators (e.g., preferred platform,

time spent, checking frequency, and typical time of day for use).

Second, to test the relationship between level of introversion and social media usage patterns, the study applied correlation analysis, using Pearson's  $r$  as the primary statistic and Spearman's  $\rho$  as an alternative depending on the distributional characteristics of the data.

This analytic approach was aligned with the study objective of determining whether introversion is associated with measurable variations in social media behaviors among Generation Z college students.

### 3.6 Ethical Considerations

Ethical safeguards were observed throughout the research process. Participants were informed of the study's purpose, assured of anonymity, and granted the right to withdraw at any point without penalty. No personally identifying information was collected, and all data were stored securely and used solely for research purposes.

## 4. Results and Discussion

### 4.1 Respondent Social Media Engagement Profile ( $N = 82$ )

The respondent group consisted of 82 Generation Z college students. Their self-reported engagement profile indicates highly habitual and time-intensive social media use, characterized more by routine checking and content consumption than by interactive participation.

In terms of daily duration, a majority reported using social media for more than seven hours per day ( $f = 50$ ; 60.9%), followed by those using it for 2–4 hours per day ( $f = 29$ ; 35.4%). Only a small minority reported less than one hour per day ( $f = 3$ ; 3.6%).

Regarding platform preference, use clustered around a few dominant platforms. TikTok emerged as the most regularly used platform ( $f = 40$ ; 48.8%), followed by Facebook ( $f = 25$ ; 30.5%) and Instagram ( $f = 14$ ; 17.1%). Minimal use was reported for YouTube ( $f = 2$ ; 2.4%) and Twitter/X ( $f = 1$ ; 1.2%).

For account-checking behavior, "Daily" checking was reported by 28.0% ( $f = 23$ ), while "Hourly" checking was reported by 25.6% ( $f = 21$ ). Two response options were both labeled "Multiple times per hour," accounting for 19.5% ( $f = 16$ ) and 26.8% ( $f = 22$ ), respectively. Taken together, 46.3% indicated checking multiple times per hour;

however, the duplicated label should be corrected in the instrument or reporting to eliminate category ambiguity.

When asked what they do most during social media use, all respondents selected “Watching” ( $f = 82$ ; 100%), while none selected commenting or posting. This pattern indicates a strongly passive, consumption-oriented engagement style within the sample.

Finally, for time-of-day usage, most respondents indicated that they use social media throughout the day ( $f = 42$ ; 51.2%), followed by evening use ( $f = 23$ ; 28.0%) and after-school use ( $f = 14$ ; 17.1%). Very few reported usage concentrated in the morning ( $f = 2$ ; 2.4%) or during school ( $f = 1$ ; 1.2%).

#### **4.2 Level of Introversion Among Generation Z College Students ( $N = 82$ )**

The results suggest that respondents exhibit introversion-related tendencies expressed primarily as (a) preference for controlled and lower-intensity social exposure and (b) reliance on online spaces for managing communication pressure and emotional regulation.

##### **In-person social comfort and interaction patterns**

Across indicators describing offline social preferences, respondents showed stronger endorsement of avoidance-oriented and small-group comfort items. The highest mean ratings were observed for avoiding social situations when feeling overwhelmed ( $M = 3.89$ ,  $SD = 1.02$ ) and feeling more at ease talking to one or two people than to a whole group ( $M = 3.78$ ,  $SD = 1.08$ ). Respondents also tended to agree that they are more comfortable spending time alone than in large groups ( $M = 3.63$ ,  $SD = 0.949$ ).

Two indicators suggest that this profile is not uniform across expression-related behaviors. Rarely taking initiative to speak in social gatherings was rated at a moderate level ( $M = 3.40$ ,  $SD = 1.17$ ), while keeping most thoughts to oneself even when wanting to speak up registered the lowest mean in this cluster ( $M = 1.60$ ,  $SD = 1.13$ ). Overall, the pattern indicates that introversion in this sample is more strongly reflected in preference for manageable interaction size and selective exposure than in consistent suppression of expression.

##### **Online self-expression and communication comfort**

Indicators reflecting online communication were generally moderate. Respondents moderately agreed that it is easier to express feelings on social media than face-to-face ( $M = 2.84$ ,  $SD = 1.18$ ), that

they feel more confident talking online than in person ( $M = 3.06$ ,  $SD = 1.07$ ), and that they prefer messaging over face-to-face speaking ( $M = 3.02$ ,  $SD = 1.07$ ). A comparatively higher mean was observed for feeling less pressured when communicating online ( $M = 3.44$ ,  $SD = 0.970$ ), suggesting that online interaction may be experienced as a lower-demand interpersonal context.

##### **Social media’s role in emotional regulation and interaction management**

The most elevated results were found in indicators describing social media as a resource for emotional regulation and interaction management. Respondents agreed that social media helps them feel connected even when alone ( $M = 3.95$ ,  $SD = 0.901$ ), that they use social media to prepare themselves before social events ( $M = 3.68$ ,  $SD = 0.887$ ), and that they use social media to recover or relax after interacting with people ( $M = 3.85$ ,  $SD = 0.833$ ). They also agreed that they scroll to calm down after a stressful day ( $M = 3.90$ ,  $SD = 0.840$ ). The highest mean in this block was observed for using social media to avoid uncomfortable in-person conversation ( $M = 3.96$ ,  $SD = 0.853$ ), indicating that for many respondents, social media functions as both leisure space and an interpersonal buffer that reduces the perceived demands of direct interaction.

#### **4.3 Relationship Between Introversion and Social Media Usage Patterns**

Pearson correlation analysis revealed a very strong, positive, and statistically significant relationship between level of introversion and social media usage patterns among the Generation Z college student respondents ( $r = 0.958$ ,  $df = 80$ ,  $p < .001$ ).

This indicates that students who reported higher introversion-related tendencies also tended to report stronger and more frequent social media usage behaviors. Substantively, the direction and magnitude of the association are consistent with the interpretation that online environments may offer a more regulated, lower-pressure engagement space for students who prefer controlled communication and less socially demanding interaction contexts.

However, the exceptionally high coefficient warrants careful interpretation. Because both constructs were measured using a single, self-report questionnaire administered at one point in time, the association may be influenced by shared method variance (e.g., response-style effects and single-source measurement). In addition, several introversion indicators in this study are operationalized through social-media-mediated coping or avoidance behaviors, which may introduce conceptual overlap with the usage-pattern construct and inflate the observed association.

Accordingly, the finding should be treated as strong correlational evidence within the present sample rather than as a causal claim.

#### 4.4 Discussion of Findings

The present findings reinforce the premise that social media is deeply embedded in Generation Z students' daily routines and serves multiple psychosocial functions, but they also highlight an important nuance: the form of engagement and the psychological role of platforms may be more consequential than platform access alone. In this sample, social media engagement was not merely frequent; it was intensive, habitual, and largely organized around consumption-oriented behaviors. A majority of respondents reported using social media for more than seven hours per day (60.9%), with TikTok as the most regularly used platform (48.8%) and use commonly distributed throughout the day (51.2%).

Such patterns align with the broader literature positioning social media as a primary space for communication, entertainment, identity expression, and belonging among Generation Z (Dimock, 2019; Valkenburg et al., 2022; Twenge, 2017).

A particularly salient result is that respondents' dominant activity while using social media was uniformly passive: all respondents (100%) indicated "watching," with no respondents selecting posting or commenting.

This behavioral emphasis matters for interpretation because the literature differentiates passive social media use from active use in terms of likely correlates. Passive use has been associated with poorer well-being outcomes among college students—particularly depressive symptoms and lower subjective well-being—often through mechanisms such as fear of missing out and social comparison processes (Delo, 2025; Jiao et al., 2025; Liu & Xiao, 2024).

Moreover, passive or excessive use has been linked to academic-related problems such as distraction, poorer concentration, and learning burnout, which can undermine academic engagement and performance (Sikarwar & Agrawal, 2025; Gong et al., 2025; Ma et al., 2025).

While the present study did not directly measure depression, burnout, or performance outcomes, the predominance of passive consumption provides an evidence-based rationale for treating "usage patterns" as qualitatively differentiated behaviors with potentially different

consequences, rather than as a neutral indicator of digital participation.

Findings on introversion further clarify why a passive, consumption-oriented style may be prevalent in this group. Respondents' introversion indicators showed a pattern of preference for lower-intensity interaction contexts and selective social exposure. The highest-rated indicators emphasized avoiding overwhelming situations ( $M = 3.89$ ) and greater ease with one-on-one or small-group interaction ( $M = 3.78$ ), alongside comfort spending time alone ( $M = 3.63$ ).

At the same time, the results suggest that the sample's introversion is not reducible to a global tendency toward suppressed self-expression; for instance, "keeping most thoughts to oneself" was rated very low ( $M = 1.60$ ), indicating that the introversion profile is more consistent with managing social stimulation than with an across-the-board inability to express opinions.

The indicators describing the emotional and interaction-management role of social media were especially pronounced. Respondents strongly endorsed social media as a tool for feeling connected when alone ( $M = 3.95$ ), preparing before social events ( $M = 3.68$ ), recovering after social interaction ( $M = 3.85$ ), calming down after stressful days through scrolling ( $M = 3.90$ ), and avoiding uncomfortable in-person conversations ( $M = 3.96$ ).

These results converge with the literature summarized in the review, which argues that social compensation mechanisms may be especially relevant for socially anxious or introverted college populations, even while rich-get-richer dynamics may apply for socially skilled users engaging actively (Chen et al., 2022; Zhou et al., 2020; Lyvers et al., 2020; Weiqin et al., 2016; Winstone et al., 2021).

In the present sample, however, the dominance of passive "watching" paired with high endorsement of emotional regulation and avoidance-related indicators suggests a pattern that is more consistent with social compensation and self-regulation than with socially expansive network-building.

The correlational result provides the most direct statistical support for this interpretive direction. The study found a strong and statistically significant positive relationship between level of introversion and social media usage patterns ( $r = 0.958$ ,  $p < .001$ ), indicating that higher introversion was associated with stronger reported usage patterns in this sample.

Substantively, this relationship is coherent with the observed functional findings: if social media is perceived as less pressuring for communication and useful for preparation, recovery, and emotional calming, then increased reliance among more introverted students becomes a plausible behavioral adaptation rather than a simple preference.

At the same time, the magnitude of the coefficient warrants cautious interpretation in an academic discussion. A correlation of this size may reflect a genuinely strong association within the studied context, but it may also be amplified by measurement characteristics—particularly because both constructs were assessed through self-report items collected within the same questionnaire framework.

This does not invalidate the result; rather, it indicates that subsequent studies may strengthen inference by using complementary measurement approaches (e.g., behavioral indicators of engagement alongside validated trait measures), or by testing whether the relationship persists when controlling for overlapping item content.

Overall, the findings suggest that Generation Z college students' social media behavior in this setting is not simply high-use; it is functionally oriented toward entertainment, information-seeking, connection maintenance, and—critically—emotional regulation and interaction management.

When combined with the observed introversion pattern and the strong positive correlation, the results support the view that introversion may shape not only the intensity of engagement but also the tendency to treat social media as a psychologically “safer” and more controllable environment for coping and social connection.

## 5. Conclusion and Recommendations

### 5.1 Conclusion

This study examined social media usage patterns among Generation Z college students and assessed how these patterns relate to introversion within the context of First City Providential College. The results indicate that social media use in this sample is both intensive and habitual, with most respondents reporting prolonged daily use, platform concentration around TikTok, and engagement distributed across the day.

A defining feature of the respondents' digital behavior is the dominance of passive consumption: all respondents reported “watching” as their primary activity, with none indicating posting or commenting.

This pattern supports the interpretation that social media, for this group, functions more as a content-consumption environment than a space of active interaction.

With respect to introversion, respondents generally demonstrated preferences consistent with lower-intensity social engagement, including comfort in small-group interaction, avoidance of overwhelming social situations, and a tendency to rely on social media as a low-pressure interpersonal space.

The strongest introversion-related indicators were those reflecting social media's function in emotional regulation and interaction management—such as using social media to feel connected when alone, to prepare before social events, to recover after interacting with people, to calm down after stress, and to avoid uncomfortable in-person conversations.

These findings suggest that social media engagement among more introverted students may be oriented less toward public participation and more toward coping, comfort, and regulated connection.

Most importantly, the analysis revealed a very strong and statistically significant positive relationship between introversion and social media usage patterns ( $r = 0.958, p < .001$ ).

This implies that higher levels of introversion are associated with stronger social media usage behaviors in the studied sample. While the study's correlational design does not support causal inference, the magnitude and direction of the association—together with the behavioral and functional patterns observed—support the conclusion that social media may serve as a psychologically manageable engagement space for introverted Generation Z college students in this setting.

### 5.2 Recommendations and Proposed Program

Based on the findings, BALANCE: A Social Media Wellness and Engagement Program is proposed to promote mindful, healthy, and developmentally balanced social media use among introverted Generation Z college students. The program is designed to strengthen students' self-awareness of digital habits, reduce reliance on social media as a primary emotion-regulation strategy, encourage manageable and meaningful offline engagement, and support psychological well-being and social adjustment. Anchored on the observed association between introversion and social media usage patterns, the proposed intervention emphasizes personality-sensitive support rather than



one-size-fits-all restrictions. Overall, the study contributes to a clearer understanding of how introversion may relate to digital engagement among Generation Z college students and highlights the relevance of context-appropriate, personality-informed initiatives that foster healthier and more adaptive social media behaviors.

In line with these implications, the recommendations below are also offered for student support services, academic management, and future research. They are framed to remain consistent with the study's descriptive–correlational scope and the observed pattern that respondents' social media engagement is largely passive (“watching”) and strongly associated with introversion, particularly in its coping and interaction-management indicators.

#### *Recommendations for Student Support and Guidance*

First, student affairs offices and guidance units may consider implementing structured digital well-being guidance focused on usage quality, not merely usage time. Given that respondents overwhelmingly reported passive consumption behavior, interventions should emphasize mindful consumption, reduction of repetitive scrolling, and intentional use aligned with specific purposes (e.g., academic information seeking, purposeful communication), rather than unstructured browsing.

Second, programs supporting introverted students should recognize that social media may serve as a coping and regulation tool. Students reported high endorsement of using social media to feel connected when alone, to prepare for social events, to recover after social interaction, and to avoid uncomfortable in-person conversations.

Guidance initiatives may therefore integrate brief psychoeducation on healthy coping alternatives (e.g., structured decompression routines, short offline recovery activities, planned social exposures) while avoiding stigmatizing introversion as a deficit. The goal is to maintain the adaptive benefits of regulated digital connection while reducing reliance that may displace offline skill-building and support.

Third, colleges may strengthen low-pressure avenues for social participation that match introverted students' preferred interaction conditions. Since respondents expressed greater ease with one-to-one or small-group contexts and reported avoiding social situations when overwhelmed, institutions may increase the availability of small-group academic communities,

peer mentoring, and structured collaborative tasks with clear roles.

This can reduce the “either online or overwhelming” pattern by offering manageable offline engagement alternatives.

#### *Recommendations for Academic Management and Classroom Practice*

Faculty and academic units may incorporate explicit strategies to manage the distraction potential of heavy social media routines. With many respondents indicating prolonged daily use and engagement spread throughout the day, classroom policies and learning design may benefit from clearer attention structures—such as short, timed activities, technology boundaries during instruction, and explicit discussion of attention management as part of study skills development.

This recommendation is particularly relevant given that students' dominant engagement mode is passive content consumption, which is often associated with habitual scrolling behavior that can carry over into academic contexts.

#### *Recommendations for Policy and Institutional Programming*

The institution may consider developing a short-term, structured, and student-friendly digital wellness initiative (e.g., a guidance-led module, seminar series, or advisory campaign) that focuses on (a) recognizing passive use routines, (b) managing stress without defaulting to continuous scrolling, and (c) building balanced online–offline social participation. Such programming may be positioned as a wellness and performance-support initiative rather than a disciplinary response, to ensure student receptiveness and sustained participation.

#### *Recommendations for Future Research*

Future studies may strengthen the evidence base in four ways. First, subsequent research may expand sample size and include multiple campuses to improve generalizability beyond the present setting. Second, researchers may employ mixed methods by adding qualitative interviews to explain how introverted students experience “less pressure” in online communication and how they interpret their reliance on social media for emotional regulation.

Third, future work may reduce common-method bias by combining survey measures with behavioral indicators (e.g., screen-time logs, app

usage categories) and validated personality scales, especially given the exceptionally high correlation observed between introversion and social media usage patterns in this study.

Fourth, future research may explicitly examine outcome variables (e.g., academic engagement, concentration, well-being indicators) to test whether passive consumption patterns mediate links between personality and academic or psychosocial functioning.

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