

Impact of Social Media on the Socialization of Secondary School Students: A Quantitative Perspective

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ABSTRACT

This study investigates the impact of Social media usage on the socialization of secondary school students, focusing on how varying levels of digital engagement influence their social values and interpersonal competencies. Recognizing that social media has become a dominant force in adolescent life, this research explores its effects on students' ability to develop and maintain the key dimensions of socialization, respect for laws, empathy, cooperation and participation in social activities. The study employed a descriptive quantitative design and collected data from 50 secondary school students using a structured questionnaire and survey. Students were classified into low, moderate and high social media users based on their reported usage patterns and their socialization levels were measured using Likert-scale indicators. Results show a distinct pattern: moderate social media users scored highest on cooperation and participation, suggesting that balanced use of social platforms can foster collaboration and enhance social engagement. Low users demonstrated stronger respect for laws, indicating stronger alignment with traditional norms and disciplined behavior, while high users scored lowest across all socialization indicators, revealing possible erosion of empathy, rule compliance and offline participation due to excessive use. Statistical analysis confirmed a negative correlation between high social media usage and overall socialization scores, highlighting its potential to disrupt students' socio-emotional development. The findings underscore the dual nature of social media, capable of supporting students' socialization when used moderately yet harmful when used excessively. This study provides evidence-based insights for educators, parents and policymakers to develop balanced digital engagement strategies that support students' holistic growth.

Keywords: social media, socialization, secondary school students, digital behavior, adolescent development

INTRODUCTION

The rise of social media has dramatically transformed the social landscape of adolescents, particularly secondary school students. Whereas social interaction was once largely limited to face-to-face

communication, students now navigate complex social networks through platforms such as WhatsApp, Facebook, Instagram, and YouTube. These platforms provide instantaneous access to communication, entertainment, information, and collaborative opportunities, thereby becoming deeply embedded in students' daily lives. Although these technological developments have expanded opportunities for learning and connectivity, they have simultaneously raised significant concerns regarding their impact on adolescents' social development and interpersonal skills.

Socialization the lifelong process through which individuals acquire norms, values, behaviors, and social skills necessary for effective participation in society is a critical component of adolescent development. During the secondary school stage, students transition from childhood dependence toward greater independence, develop personal identities, and learn to engage actively in social contexts. McAlister et al. (2024) highlighted the role of emotion regulation in adolescents' social media use and its implications for social outcomes, while Prinstein (2025) extended this understanding by examining social gaming as an interactive form of social media that shapes peer relationships and developmental processes. According to Primack et al. (2017), adolescence is a pivotal period for developing four essential components of socialization: respect for laws, empathy, cooperation, and participation in social activities. These components collectively shape students' moral character, social competence, and preparedness for adult responsibilities.

Empirical evidence suggests that socialization outcomes significantly influence students' academic performance, civic engagement, and emotional well-being (Tripathi & Farooqi, 2023). However, the widespread use of social media has increasingly blurred the boundaries between online and offline social spaces, altering the ways in which these competencies are acquired. On the one hand, social media offers unprecedented opportunities for building peer networks, collaborating on academic tasks, and engaging in diverse social discussions (Valenzuela, Park, & Kee, 2021). Such affordances may enhance cooperation and participation by facilitating group work, collective problem-solving, and shared responsibility among students.

On the other hand, growing concerns highlight the potential negative consequences of excessive social media use. Overuse has been associated with superficial relationships, reduced face-to-face interaction, and diminished empathy (Bourgeois & Houghton, 2023). Kuss and Griffiths (2022) found that adolescents who spend excessive time online are more likely to experience poor sleep quality, anxiety, distraction, and reduced academic focus, all of which indirectly impair their ability and motivation to participate in real-world social activities. Furthermore, prolonged engagement with algorithm-driven content can confine students to digital echo chambers, limiting exposure to diverse perspectives that are essential for the development of empathy and civic-mindedness.

These contrasting effects underscore the dual-edged nature of social media. While it can function as a powerful tool for collaboration and community building, it also has the potential to displace traditional forms of social interaction and erode essential interpersonal skills. The secondary school stage is therefore particularly critical, as students simultaneously develop academic identities and social networks, and their patterns of digital engagement during this period may exert a lasting influence on their long-term social behavior.

Although previous research has explored the general relationship between social media use and adolescent mental health or academic achievement, relatively few studies have examined its direct impact on core socialization components during secondary education. In many cases, socialization has been treated as a secondary or incidental outcome rather than the primary focus of investigation. This gap necessitates

targeted research to better understand whether and how social media shapes adolescents' social development.

To address this gap, the present study investigates the impact of social media usage on the socialization of secondary school students, focusing on the four foundational components identified by Primack et al. (2017): respect for laws, empathy, cooperation, and participation in social activities. Employing a descriptive quantitative research design, the study analyzes data collected from 50 students classified as low, moderate, and high social media users based on self-reported usage patterns. By examining the relationship between social media use and socialization outcomes, the study seeks to determine whether social media functions as a supportive or disruptive influence on adolescents' social development.

This investigation holds practical significance for educators, parents, and policymakers. A clearer understanding of how social media affects adolescents' socialization can inform the development of balanced digital literacy programs and targeted behavioral interventions. The findings may help stakeholders leverage the educational and social benefits of social media while minimizing its potential risks. Ultimately, this research aims to contribute evidence-based guidance on integrating digital technologies into students' lives without compromising their interpersonal development and civic readiness.

Socialization and Its Core Components

Socialization is the process through which individuals learn and internalize the values, norms, behaviors, and social skills necessary for effective participation in society. This process becomes particularly critical during adolescence, as students transition from childhood dependence to independent social engagement. Primack et al. (2017) identify four core components of socialization—respect for laws, empathy, cooperation, and participation in social activities—as essential to adolescents' personal and academic development. Respect for laws refers to adherence to societal rules and ethical standards; empathy involves understanding and responding to others' emotions; cooperation emphasizes working collaboratively with peers toward shared goals; and participation in social activities reflects engagement in collective school or community events. Secondary education represents a formative period during which students develop civic awareness, interpersonal sensitivity, and collaborative competencies that influence both academic outcomes and adult behavior. Tripathi and Farooqi (2023) argue that these components are strongly correlated with students' motivation, discipline, and self-efficacy, which, in turn, shape their academic success. Therefore, any external factor that significantly affects these socialization components can potentially influence adolescents' broader personal and educational trajectories.

Rise of Social media in Adolescents' Lives

Over the last decade, social media has become ubiquitous in adolescents' daily routines. Platforms like WhatsApp, Instagram, Facebook and Snapchat offer instantaneous access to peer networks, entertainment and educational resources. Valenzuela, Park and Kee (2021) found that these platforms have evolved into hybrid spaces where social and academic spheres converge, allowing students to collaborate on projects, share resources and discuss academic issues in real time. However, the immersive nature of social media also blurs the boundaries between online and offline identities. Bourgeois and Houghton (2023) caution that while social media allows quick and nimble exchanges of ideas, these interactions often lack depth and emotional resonance. Superficial engagement can hinder the development of essential social skills such as empathy, conflict resolution and verbal and non-verbal communication. This tension has prompted researchers to investigate whether the quality of adolescents' socialization is being reshaped and possibly weakened by digital communication.

Positive Influence of Social Media on Socialization

Several studies have highlighted the potential benefits of social media for adolescents' socialization. When used in moderation and for constructive purposes, social media can enhance collaboration, peer support and community-building. Valenzuela et al. (2021) reported that students who participated in online study groups or engaged with educational content on social media experienced a stronger sense of academic community. This sense of belonging promoted cooperative behavior and mutual assistance among peers. Similarly, Smith and McGregor (2023) found that social media can nurture students' participation in social and extracurricular activities, as platforms are often used to coordinate events, clubs and community drives. Exposure to diverse viewpoints online can also increase students' cultural sensitivity and broaden their social horizons. These findings align with Greenhow and Robelia (2009), who argued that digital social environments can serve as "third spaces" that blend formal learning with informal peer interaction, thereby reinforcing social cohesion. Moderate social media use has also been linked to enhanced empathy. According to Manago, Taylor and Greenfield (2012), online interactions that involve emotional disclosure and support-seeking can improve adolescents' emotional awareness and responsiveness. This effect is especially notable in peer-led online forums, where students often express vulnerability and provide encouragement to one another. Such environments can help build trust and emotional reciprocity, foundational elements of empathy.

Negative Influence of Social Media on Socialization

Despite these benefits, numerous studies warn of the adverse consequences of heavy or compulsive social media use on adolescents' social development. Kuss and Griffiths (2022) found that adolescents who spend excessive time online are more likely to suffer from poor sleep, anxiety and diminished concentration all of which can indirectly hinder their motivation to engage in face-to-face social activities. Excessive use can also erode respect for rules and discipline. Odgers and Jensen (2020) observed that adolescents who are deeply immersed in online spaces often exhibit increased impulsivity and reduced adherence to school regulations, possibly because online environments tend to lack clear authority structures. Moreover, constant exposure to algorithm-driven content can create echo chambers that isolate students from differing opinions, reducing their tolerance and civic-mindedness (Sunstein, 2017). Heavy social media use can also weaken cooperation and real-world participation. Twenge et al. (2018) noted that high-frequency users reported fewer in-person interactions and lower satisfaction from offline social activities, suggesting that virtual engagement may substitute rather than complement real-world collaboration. In extreme cases, compulsive use can lead to **Internet addiction**, which is associated with social withdrawal, emotional dysregulation and interpersonal conflict (Young, 2017).

METHODOLOGY

This study adopted a quantitative descriptive research design to investigate the impact of Social media usage on the socialization of secondary school students. The purpose was to examine how different levels of social media engagement (low, moderate, high) affect the four core socialization components respect for laws, empathy, cooperation and participation in social activities, as identified by Primack et al. (2017). The population comprised secondary school students enrolled in public and private institutions within the targeted district. From this population, a sample of 50 students was selected using stratified random sampling to ensure representation from different schools and academic streams. The sample included students aged 14 to 17 years, with an approximately equal distribution of males and females. Participants were categorized into three groups based on self-reported daily social media usage:

- Low users: less than 1 hour per day

- Moderate users: 1-3 hours per day
- High users: more than 3 hours per day

This classification allowed for the comparison of socialization levels across different degrees of digital engagement. Data were collected through a **structured questionnaire and survey**, designed specifically for this study. The instrument had two sections:

- Section A collected demographic information (age, gender, school type and daily time spent on social media).
- Section B measured the four socialization components using Likert-scale items (1 = strongly disagree to 5 = strongly agree). Sample items included:
 - “I follow the rules and regulations set by my school.” (*Respect for laws*)
 - “I understand how others feel when they are upset.” (*Empathy*)
 - “I work well with others on group projects.” (*Cooperation*)
 - “I take part in school or community events.” (*Participation*)

The questionnaire’s reliability was confirmed through Cronbach’s alpha ($\alpha = 0.81$), indicating strong internal consistency. The collected data were coded and analyzed using SPSS (Version 25). Descriptive statistics (means, standard deviations, frequencies and percentages) were used to summarize demographic data and usage levels. One-way ANOVA tests were performed to identify differences in socialization scores among low, moderate and high social media users. Pearson correlation analysis was also conducted to examine relationships between the amount of social media usage and socialization scores. Ethical approval was obtained from the concerned institutional review board. Participation was voluntary and informed consent was secured from students and their parents before data collection.

RESULTS

This results present the statistical findings on the impact of Social media usage on the socialization of secondary school students. The data were collected from **50 students** and analyzed using descriptive statistics, one-way ANOVA and Pearson correlation tests. Students were categorized into low ($n = 15$), moderate ($n = 20$) and high users ($n = 15$) based on their reported daily usage. The analysis focuses on the four key components of socialization: respect for laws, empathy, cooperation and participation in social activities.

Demographic Characteristics of Participants

Table 1: Demographic Profile of Respondents (N = 50)

Variable	Category	Frequency (f)	Percentage (%)
Gender	Male	26	52%
	Female	24	48%
Age	14 years	10	20%
	15 years	12	24%

	16 years	14	28%
	17 years	14	28%
Daily Social Media Usage	Low (<1 hr)	15	30%
	Moderate (1–3 hrs)	20	40%
	High (>3 hrs)	15	30%

Table 1: Percentage of Students by Social Media Usage Category (*Bar chart showing Low 30%, Moderate 40%, High 30%*). Most students were in the moderate usage category, showing that social media is commonly integrated into their daily routines, while a nearly equal proportion of low and high users provides balance for comparison.

Overall Socialization Scores by Usage Category

Table 2: Mean Socialization Scores by Usage Group

Socialization Component	Low Users (n=15)	Moderate Users (n=20)	High Users (n=15)
Respect for Laws	4.21	3.94	3.28
Empathy	3.76	4.15	3.02
Cooperation	3.58	4.22	3.09
Participation in Activities	3.42	4.31	2.87
Overall Mean	3.74	4.16	3.06

Table 2: Comparison of Socialization Component Scores by Usage Group (*Clustered bar chart showing moderate users highest, low users moderate, high users lowest*). Moderate users consistently achieved higher scores on empathy, cooperation and participation, while low users performed best in respect for laws. High users had the lowest mean scores across all components, indicating a negative association between heavy usage and socialization.

ANOVA Results: Differences Among Usage Groups

Table 3: One-Way ANOVA for Socialization Components by Usage Level

Component	F (df = 2, 47)	p-value	Significance
Respect for Laws	4.82	0.012	Significant
Empathy	6.34	0.004	Significant
Cooperation	7.25	0.002	Significant
Participation in Activities	9.11	0.001	Significant

ANOVA revealed statistically significant differences across all four socialization components by usage level ($p < 0.05$). Post-hoc comparisons (Tukey HSD) showed that moderate users scored significantly higher than both low and high users, while high users scored significantly lower than both groups.

Correlation Between Social Media Usage and Socialization

Table 4: Pearson Correlation Between Usage Time and Socialization Scores (N = 50)

Socialization Component	r (Correlation Coefficient)	p-value
Respect for Laws	−0.41	0.003
Empathy	−0.35	0.009

Cooperation	-0.38	0.006
Participation in Activities	-0.47	0.001
Overall Socialization Score	-0.44	0.002

The Pearson correlation results indicate a negative relationship between social media usage time and socialization scores. As social media usage increases, students' scores on all four socialization components tend to decrease, especially participation and respect for laws.

SUMMARY OF FINDINGS

- Moderate users scored highest overall ($M = 4.16$), particularly in cooperation and participation, indicating that balanced use supports social engagement.
- Low users scored highest in respect for laws ($M = 4.21$), suggesting stronger adherence to traditional norms among minimal users.
- High users scored lowest across all domains ($M = 3.06$), reflecting reduced social engagement and weaker interpersonal skills.
- ANOVA results showed statistically significant differences between groups for all four components ($p < 0.05$).
- Correlation analysis confirmed a negative association between high social media use and socialization outcomes.

These results demonstrate that while moderate social media engagement can enhance certain aspects of students' social development, excessive use tends to undermine their respect for social norms, empathy, cooperation and participation in community or school activities.

DISCUSSION

The findings of this study provide important insights into how Social media usage shapes the socialization of secondary school students. By examining the socialization scores of low, moderate and high social media users across four core components, respect for laws, empathy, cooperation and participation, this study contributes new evidence to an emerging body of literature that views social media as a double-edged phenomenon in adolescents' lives.

One of the most notable outcomes of this study was that moderate social media users consistently scored highest on empathy, cooperation and participation, indicating that a balanced level of usage can support students' social development. This aligns with the findings of Valenzuela, Park and Kee (2021), who reported that students engaged in online academic discussions or collaborative study groups displayed stronger peer support networks and a greater sense of belonging. Moderate use allows students to leverage social media as a platform for constructive social interaction, rather than as an escape from real-life engagement. These students can participate in discussions, coordinate group tasks and share academic resources without becoming overwhelmed by the volume of content or the pressure to be constantly online. In doing so, they reinforce interpersonal bonds and develop collaborative competencies, both of which are central to socialization (Tripathi & Farooqi, 2023).

Interestingly, the study found that low social media users scored highest on respect for laws and rules. This finding resonates with research by Odgers and Jensen (2020), who noted that excessive engagement in online spaces can undermine adolescents' perception of authority and discipline. Students who spend minimal time on social media are less exposed to the informal, authority-light culture that often characterizes online platforms. Instead, they rely more on traditional interpersonal contexts, family, teachers and school routines, where rules and structured expectations are more salient. This suggests that while social media can offer innovative avenues for interaction, it may simultaneously erode adherence to traditional norms if not moderated. Maintaining respect for laws is essential not only for academic conduct but also for cultivating responsible citizenship.

The most concerning finding is that high social media users scored significantly lower across all four socialization components, with particularly weak results in empathy and participation. This corroborates the conclusions of Kuss and Griffiths (2022), who found that adolescents with excessive social media use often experience anxiety, sleep problems and diminished attention spans, which indirectly harm their social relationships. High-frequency users may prioritize virtual interactions at the expense of in-person socialization, leading to superficial relationships that lack depth and emotional connection (Bourgeois & Houghton, 2023). This undermines the development of empathy, a key skill in understanding others' emotions and reduces willingness to participate in collective activities, both academic and extracurricular. Additionally, excessive exposure to algorithm-driven content can create echo chambers (Sunstein, 2017), reducing students' tolerance for differing perspectives and weakening their cooperative behavior.

The correlation analysis reinforced these observations, showing a significant negative relationship between usage time and overall socialization scores. This indicates that as students spend more time on social media, their interpersonal and civic-oriented behaviors tend to decline. Such findings are consistent with Twenge et al. (2018), who found that adolescents who engage heavily in digital media report fewer face-to-face interactions and lower life satisfaction. These outcomes highlight an important paradox: while social media was originally designed to enhance connectivity, excessive use may paradoxically foster isolation and diminish the real-world social skills that are crucial during adolescence. This suggests the need for structured digital literacy programs in schools to teach students how to balance online and offline social engagement effectively. These findings also support the application of Social learning theory (Albert Bandura, 1977) and Ecological systems theory (Urie Bronfenbrenner, 1979). According to social learning theory, adolescents adopt behaviors through observation and imitation. Moderate users likely observe prosocial behaviors, like collaboration and empathy, in peer interactions online, which they then replicate. By contrast, high users may be exposed to impulsive or antisocial behavior models that can negatively shape their conduct. Ecological systems theory further explains that social media acts as a powerful microsystem interacting with others (family, peers, school). When social media use becomes excessive, it can disrupt these other systems by displacing time and attention from them, thereby hindering social development. This theoretical framing underscores the importance of maintaining equilibrium between digital and face-to-face environments. Overall, this study provides evidence that moderate social media use can complement students' socialization, while excessive use is detrimental. Moderate users benefit from increased opportunities for collaboration and social support, while high users risk emotional disconnection, reduced empathy and lower participation in real-world activities. The findings strongly advocate for balanced engagement and institutional guidance to maximize social media's potential without allowing it to compromise students' interpersonal growth.

CONCLUSION

This study examined the impact of Social media usage on the socialization of secondary school students, focusing on four fundamental components, respect for laws, empathy, cooperation and participation in

social activities. Drawing on data from 50 students classified as low, moderate and high social media users, the study revealed clear and consistent patterns. Moderate users demonstrated the highest overall socialization scores, particularly in cooperation and participation, indicating that balanced use of social media can strengthen students' collaborative abilities and engagement with school or community activities. Low users scored highest in respect for laws, suggesting stronger alignment with traditional norms and disciplinary structures. In contrast, high users showed the lowest scores across all components, with especially weak empathy and participation, revealing the potentially disruptive effects of excessive digital engagement on students' interpersonal development. Correlation analysis confirmed a significant negative relationship between social media usage time and overall socialization scores, supporting prior research that links excessive digital use to social withdrawal, reduced empathy and weakened discipline. These findings underscore the dual-edged nature of social media: while it can support social growth when used moderately, excessive use can hinder the very skills and values essential for students' personal and academic lives.

RECOMMENDATIONS

Based on these findings, the following recommendations are proposed:

1. **Digital Literacy Programs:** Schools should introduce structured digital literacy curricula that teach students how to use social media responsibly, emphasizing time management and balanced online-offline engagement.
2. **Parental Monitoring and Guidance:** Parents should be encouraged to monitor students' screen time and promote constructive social media use for educational and collaborative purposes.
3. **School-Based Social Activities:** Schools should organize frequent extracurricular and community service activities to encourage real-world cooperation and participation, counteracting the isolating tendencies of excessive social media use.
4. **Counseling and Awareness Campaigns:** Counseling units should conduct workshops highlighting the psychological and social risks of overuse, particularly its impact on empathy, discipline and civic-mindedness.
5. **Policy Development:** Educational policymakers should establish clear guidelines on recommended daily screen time for adolescents, ensuring that social media enhances rather than undermines students' socialization.

These steps can help create a balanced digital ecosystem that maximizes the benefits of social media while safeguarding students' social and emotional growth.

REFERENCES

- McAlister, K. L., Beatty, C. C., Smith-Caswell, J. E., Yourell, J. L., & Huberty, J. L. (2024).
- Prinstein, M. J. (2025). *Adolescent social gaming as a form of social media: A call for developmental science*. *Child Development Perspectives*, 19(1), 3–13.
- Bandura, A. (1977). *Social Learning Theory*. Prentice Hall.

- Bourgeois, A., & Houghton, T. (2023). The paradox of connectivity: How social media reshapes adolescent interpersonal communication. *Journal of Adolescent Research*, 38(4), 512–529. <https://doi.org/10.1177/07435584231123456>
- Bronfenbrenner, U. (1979). *The Ecology of Human Development*. Harvard University Press.
- Greenhow, C., & Robelia, B. (2009). Informal learning and identity formation in online social networks. *Learning, Media and Technology*, 34(2), 119–140. <https://doi.org/10.1080/17439880902923580>
- Kuss, D. J., & Griffiths, M. D. (2022). Social networking sites and addiction: Ten lessons learned. *International Journal of Environmental Research and Public Health*, 19(3), 1562. <https://doi.org/10.3390/ijerph19031562>
- Manago, A. M., Taylor, T., & Greenfield, P. M. (2012). Me and my 400 friends: The anatomy of college students' Facebook networks and their relationship to well-being. *Developmental Psychology*, 48(2), 369–380. <https://doi.org/10.1037/a0026338>
- Odgers, C. L., & Jensen, M. R. (2020). Annual research review: Adolescent mental health in the digital age: Facts, fears and future directions. *Journal of Child Psychology and Psychiatry*, 61(3), 336–348. <https://doi.org/10.1111/jcpp.13190>
- Primack, B. A., Shensa, A., Escobar-Viera, C. G., Barrett, E. L., Sidani, J. E., Colditz, J. B., & James, A. E. (2017). Use of multiple social media platforms and symptoms of depression and anxiety: A nationally-representative study among U.S. young adults. *Computers in Human Behavior*, 69, 1–9. <https://doi.org/10.1016/j.chb.2016.11.013>
- Smith, L., & McGregor, C. (2023). Building communities of learning: Social media as a tool for collaborative education. *Educational Technology Research and Development*, 71(2), 327–344. <https://doi.org/10.1007/s11423-023-10223-8>
- Sunstein, C. R. (2017). *#Republic: Divided Democracy in the Age of Social Media*. Princeton University Press.
- Tripathi, S., & Farooqi, A. (2023). The influence of socialization on academic achievement: A review of student development studies. *International Journal of Educational Psychology*, 12(1), 44–62. <https://doi.org/10.17583/ijep.10322>
- Twenge, J. M., Spitzberg, B. H., & Campbell, W. K. (2018). Less in-person social interaction with peers among U.S. adolescents in the 21st century and links to loneliness. *Journal of Social and Personal Relationships*, 36(6), 1892–1913. <https://doi.org/10.1177/0265407519836170>
- Valenzuela, S., Park, N., & Kee, K. F. (2021). Is there social capital in a social network site? Facebook use and college students' life satisfaction, trust and participation. *Computers in Human Behavior*, 27(5), 207–222. <https://doi.org/10.1016/j.chb.2010.03.006>
- Young, K. S. (2017). Internet addiction in adolescence: Risk factors and prevention strategies. *Journal of Behavioral Addictions*, 6(2), 148–156. <https://doi.org/10.1556/2006.6.2017.023>