
**SOCIAL MEDIA ENGAGEMENT AND MENTAL WELL-BEING
AMONG ELEMENTARY PUPILS: A QUANTITATIVE
INVESTIGATION OF COGNITIVE, BEHAVIORAL, AND AFFECTIVE
DIMENSIONS**

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ABSTRACT

This quantitative study examined the level of social media engagement among Grade 6 pupils in selected public elementary schools in Kidapawan City and its influence on their mental well-being. Using a descriptive-correlational design, data were collected from 258 pupils through stratified random sampling. The study assessed social media engagement across three dimensions—cognitive, behavioral, and emotional or affective engagement—and mental well-being across three dimensions: emotional health, social relationships, and academic-related coping strategies. Statistical analyses included mean and weighted mean, Spearman's Rank-Order Correlation, and Multiple Regression Analysis. Findings revealed that pupils were highly engaged in social media across all three dimensions (overall weighted mean = 4.49). Mental well-being scores were consistently high (overall weighted mean = 4.50, described as Strongly Agree). Correlation analysis showed that emotional or affective engagement was significantly associated with emotional health ($r = .107$, $p = .008$). Multiple regression analysis confirmed that social media engagement significantly influenced emotional health ($F = 1.342$, $p = .001$), social relationships ($F = 1.023$, $p = .001$), and academic-related coping strategies ($F = 1.932$, $p = .000$). These findings underscore the central role of social media in shaping pupils' psychological and academic well-being, and highlight the need for guided, balanced digital engagement in elementary education.

KEYWORDS: social media engagement, mental well-being, cognitive engagement, behavioral engagement, emotional health, academic coping, elementary pupils, Kidapawan City.

INTRODUCTION

The rapid proliferation of digital technology has fundamentally transformed how children and adolescents communicate, learn, and construct their social identities. Among elementary pupils, social media platforms such as Facebook, YouTube, TikTok, and Messenger have become omnipresent fixtures in daily life, offering both educational opportunities and psychological risks. Understanding the relationship between social media engagement and pupils' mental well-being has thus become a pressing concern for educators, policymakers, and school administrators worldwide.

In the Philippine context, social and economic disparities create uneven experiences of social media engagement among young learners. While some pupils possess robust digital skills and access, others in rural and underserved communities face significant barriers. These disparities intersect with mental health outcomes, academic performance, and the quality of social relationships that pupils maintain both online and offline (Casilao & Salapa, 2024; Salacut et al., 2025).

Within public schools in Kidapawan City, teachers have observed that pupils increasingly draw upon social media not only for social connection but also for academic support—seeking clarification of lessons, accessing study materials, and collaborating with peers. Yet this same engagement can expose pupils to online comparisons, cyberbullying, and academic distractions that undermine their emotional stability and scholastic focus (Cairo et al., 2024; Anselmo, 2024).

Despite growing empirical attention to social media's effects on adolescent mental health globally, few studies have specifically examined how cognitive, behavioral, and affective dimensions of social media engagement interact with the mental well-being of elementary-aged pupils in the Philippine context. This gap motivated the present quantitative investigation, which sought to measure these dynamics with precision through validated survey instruments and rigorous statistical analysis.

The study was anchored on the Social Media Engagement Theory (Khan, 2017), which posits that individuals engage with social media platforms through interrelated cognitive, emotional, and behavioral processes. These processes, when balanced and purposeful, can promote psychological resilience, social connectedness, and academic motivation. Conversely,

excessive or negatively oriented engagement may precipitate emotional distress and academic disengagement. Complementing this, the Revised Uses and Gratifications Theory (Sundar & Limperos, 2015) provides the conceptual rationale for examining how pupils use social media to satisfy cognitive, emotional, and social needs.

The primary objective of this study was to determine the level of pupils' social media engagement and mental well-being, to examine whether a significant relationship exists between these variables, and to identify the extent to which social media engagement influences mental well-being outcomes.

Research Questions

This study specifically sought to answer the following questions: (1) What is the level of pupils' social media engagement in terms of cognitive engagement, behavioral engagement, and emotional or affective engagement? (2) What is the level of pupils' mental well-being in terms of emotional health, social relationships, and academic-related coping strategies? (3) Is there a significant relationship between pupils' social media engagement and their mental well-being? (4) Is there a significant influence of pupils' social media engagement on their mental well-being?

METHODOLOGY

Research Design

This study employed a descriptive-correlational research design, which is well-suited to examining the nature and strength of relationships between variables without manipulating them (Cochran, 2015). The design allowed the researchers to describe the levels of social media engagement and mental well-being among pupils and to determine whether significant associations and predictive influences existed between these constructs.

Participants and Sampling

The study population consisted of 781 Grade 6 pupils enrolled in four selected central public elementary schools across Districts 1, 2, 3, and 4 of the Kidapawan City Division for the school year 2024–2025. Using Slovin's formula at a 5% margin of error, a sample of 258 pupils was computed and proportionally allocated across schools through stratified random sampling. Kidapawan City Pilot Elementary School (District 1) contributed 171 respondents; Manongol Central Elementary School (District 2) contributed 31; Lanao Central Elementary School (District 3) contributed 30; and Paco Central Elementary School (District 4) contributed 26.

Inclusion criteria required that respondents be officially enrolled Grade 6 pupils who possessed active social media accounts and whose parents or guardians provided written informed consent. Pupils who were absent during data collection, who did not use social media, or who lacked parental consent were excluded.

Research Instruments

Two validated instruments were used to collect data. The first instrument, adapted from the Gen Z Social Media Engagement Survey (He et al., 2015), assessed pupils' social media engagement across three domains: cognitive engagement (mental effort, critical thinking, and focus applied to social media content), behavioral engagement (visible actions including sharing, collaborating, and communicating), and emotional or affective engagement (feelings, attitudes, and emotional responses toward online interactions). This instrument demonstrated high internal reliability in prior studies (Cronbach's $\alpha = 0.95$). Responses were recorded on a five-point Likert scale ranging from 1 (Very Slightly Engaged) to 5 (Highly Engaged).

The second instrument, an adapted version of the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS; Tennant et al., 2007), measured pupils' mental well-being across three dimensions: emotional health (ability to manage feelings and maintain emotional stability), social relationships (quality of peer interactions, trust, and sense of belonging), and academic-related coping strategies (self-regulation, focus management, and stress coping behaviors). Responses were rated on a five-point Likert scale ranging from 1 (Very Slightly Agree) to 5 (Strongly Agree).

Statistical Analysis

Mean and weighted mean scores were used to describe the levels of social media engagement and mental well-being across all dimensions. Spearman's Rank-Order Correlation was applied to determine the nature and significance of the relationship between social media engagement dimensions and mental well-being indicators, given the ordinal nature of the data. Multiple Regression Analysis was subsequently used to determine the predictive influence of social media engagement dimensions on each mental well-being outcome, with mental well-being as the dependent variable.

RESULTS AND DISCUSSION

Level of Social Media Engagement

Table 1 presents the summary of pupils' social media engagement across all three dimensions. Results revealed an overall weighted mean of 4.49, corresponding to the

descriptor Highly Engaged, indicating that pupils consistently and actively engage with social media platforms for learning, communication, and emotional expression.

Table 1. Summary of Pupils' Social Media Engagement.

Dimension	Weighted Mean	Description
Cognitive Engagement	4.50	Highly Engaged
Behavioral Engagement	4.48	Highly Engaged
Emotional/Affective Engagement	4.50	Highly Engaged
Overall Weighted Mean	4.49	Highly Engaged

Cognitive engagement obtained a weighted mean of 4.50, reflecting that pupils regularly use social media to search for lessons, interpret online videos for academic subjects, and save study materials for later review. Behavioral engagement scored 4.48, indicating that pupils frequently collaborate with classmates through group chats, participate in online academic discussions, and communicate directly with teachers via Messenger. Emotional or affective engagement likewise obtained a weighted mean of 4.50, demonstrating that pupils derive motivation, happiness, and confidence from positive social media interactions, particularly from consuming inspirational content and receiving peer encouragement online.

These findings are consistent with Nuevo (2023), who found that social media use in learning contexts stimulates multiple dimensions of student engagement simultaneously. Du and Wang (2024) similarly observed that socially engaged learners are better positioned to integrate digital activities with positive academic self-identity. The high levels of engagement across all three dimensions suggest that social media has become deeply embedded in pupils' daily academic and social routines, functioning not merely as entertainment but as a substantive resource for learning and emotional support.

Level of Mental Well-Being

Table 2 presents the summary of pupils' mental well-being across emotional health, social relationships, and academic-related coping strategies.

Table 2. Summary of Pupils' Mental Well-Being.

Dimension	Weighted Mean	Description
Emotional Health	4.48	Strongly Agree
Social Relationships	4.51	Strongly Agree
Academic-Related Coping Strategies	4.51	Strongly Agree
Overall Weighted Mean	4.50	Strongly Agree

The overall weighted mean of 4.50 (Strongly Agree) indicates that pupils report consistently high levels of mental well-being across all dimensions. Social relationships and academic-related coping strategies both achieved the highest weighted mean of 4.51, suggesting that pupils perceive strong peer support through online interactions and maintain effective self-regulation strategies for managing academic demands. Emotional health scored 4.48, reflecting that pupils generally experience positive emotional states, practice online mindfulness, and engage in self-care behaviors that buffer against digital stressors.

These results align with the findings of Marciano et al. (2023), who demonstrated that positive online experiences and inspiration correlate with higher levels of adolescent flourishing. Steinsbekk et al. (2024) similarly found that social media engagement, when oriented toward mutual support and positive peer interaction, contributes to stronger offline friendships and greater well-being. The consistently high mental well-being scores suggest that, within the study population, social media engagement functions predominantly as a constructive force supporting emotional balance and social connectedness.

Relationship Between Social Media Engagement and Mental Well-Being

Table 3 presents the results of Spearman's Rank-Order Correlation analysis examining the relationship between social media engagement dimensions and mental well-being indicators.

Table 3. Spearman's Correlation Between Social Media Engagement and Mental Well-Being.

Social Media Engagement	Emotional Health	Social Relationships	Academic Coping
Cognitive Engagement	$r = -.015, p = .809$	$r = -.017, p = .781$	$r = -.107, p = .086$
Behavioral Engagement	$r = .090, p = .148$	$r = -.041, p = .513$	$r = -.065, p = .299$
Emotional/Affective Engagement	$r = .107^{**}, p = .008^*$	$r = .093, p = .134$	$r = .086, p = .169$

The analysis revealed that emotional or affective engagement was the only dimension that demonstrated a statistically significant relationship with mental well-being, specifically with emotional health ($r = .107, p = .008$). This finding led to the rejection of the null hypothesis for this specific association. Cognitive and behavioral engagement dimensions did not yield significant correlations with any mental well-being indicator at the .05 level of significance.

The significant positive correlation between affective engagement and emotional health is theoretically coherent. Pupils who derive joy, motivation, and confidence from their social media interactions—who feel inspired by motivational posts, encouraged by peer reactions, and emotionally supported through online friendships—are likely to experience enhanced emotional health and greater capacity to manage daily stressors. This is consistent with Dreier and Boyd (2023), who emphasized that adolescents use social media as a space to seek emotional connection and validation in ways that meaningfully influence their well-being. Sanchez and Jenkins (2024) further affirmed that pupils' social media participation is deeply entangled with their socio-emotional lived experience.

Influence of Social Media Engagement on Mental Well-Being

Table 4 summarizes the results of Multiple Regression Analysis, which examined the predictive influence of social media engagement dimensions on each mental well-being outcome.

Table 4. Summary of Multiple Regression Analysis: Social Media Engagement on Mental Well-Being.

Outcome Variable	R²	F-Value	p-value	Decision
Emotional Health	0.016	1.342	0.001	Significant
Social Relationships	0.012	1.023	0.001	Significant
Academic-Related Coping Strategies	0.022	1.932	0.000	Significant

The regression analysis confirmed that social media engagement dimensions collectively exerted a statistically significant influence on all three mental well-being outcomes. For emotional health ($F = 1.342$, $p = .001$, $R^2 = .016$), emotional or affective engagement emerged as the significant individual predictor ($\beta = .085$, $p = .006$). This indicates that pupils who engage more positively and emotionally with social media content tend to report better emotional health outcomes. For social relationships ($F = 1.023$, $p = .001$, $R^2 = .012$), both behavioral engagement ($\beta = -.030$, $p = .007$) and emotional or affective engagement ($\beta = .108$, $p = .005$) were significant predictors. Notably, behavioral engagement exhibited a negative beta coefficient, suggesting that excessive or unbalanced behavioral engagement—without corresponding positive emotional investment—may adversely affect the quality of pupils' social relationships. For academic-related coping strategies ($F = 1.932$, $p = .000$, $R^2 = .022$), cognitive engagement was the significant predictor ($\beta = -.108$, $p = .009$), indicating a nuanced relationship where higher cognitive engagement with social media content

paradoxically associates with greater need for academic coping, possibly reflecting that pupils who use social media extensively for academic purposes also experience higher academic pressure requiring deliberate self-regulation.

The explained variance across all outcomes ($R^2 = .012-.022$) was modest, indicating that while social media engagement is a statistically significant predictor of mental well-being, a substantial proportion of variance in mental health outcomes is attributable to factors beyond social media use, including family support, school climate, peer dynamics, and individual personality traits. These findings are consistent with Sanchez and Jenkins (2024), who found that pupils' positive peer engagement on social media contributes meaningfully to academic coping and emotional well-being. Dreier and Boyd (2022) similarly established that emotional engagement on social media platforms is linked to better well-being when adolescents can express and regulate their emotions within supportive online contexts.

CONCLUSIONS

This quantitative study provides empirical evidence that elementary pupils in Kidapawan City engage extensively with social media across cognitive, behavioral, and emotional dimensions, with consistently high mental well-being scores across all measured indicators. Emotional or affective engagement emerged as the most significant dimension linking social media use to mental health outcomes, demonstrating a positive relationship with emotional health and a predictive influence on both emotional health and social relationships. Cognitive engagement predicted academic coping strategies, while behavioral engagement exerted a nuanced, negative influence on social relationships when unbalanced.

These findings carry important implications for educational practice. Schools must move beyond simplistic narratives that frame social media engagement as uniformly harmful or uniformly beneficial for pupils' mental health. Instead, the evidence suggests that the quality and orientation of engagement—particularly its emotional and cognitive character—are decisive factors in determining whether social media interactions promote or undermine pupil well-being. Deliberate pedagogical strategies that harness positive emotional engagement while cultivating critical cognitive skills may optimize the benefits of social media for pupils' academic and psychological development.

Recommendations

Based on the findings of this study, the following recommendations are offered. First, schools should design and implement structured digital wellness programs that equip pupils with

emotional regulation skills and media literacy competencies, enabling them to engage with social media in ways that maximize motivational and emotional benefits while minimizing exposure to harmful content. Second, teachers should be professionally developed to leverage pupils' existing high levels of social media engagement for academic purposes, integrating platforms such as Messenger and YouTube as pedagogical tools within a supervised framework. Third, school administrators should establish clear institutional policies governing social media use during school hours while actively promoting balanced digital habits through counseling services and peer support programs. Fourth, future research should employ longitudinal designs and objective measures of social media use to more robustly establish the directional causal relationships between engagement patterns and mental well-being outcomes across diverse pupil populations.

REFERENCES

1. Cairo, J. P. A., Crampatan, K. F. C., Gallos, D. J. R., & Escarlos, G. S. (2024). Classroom codes: Feminist perspective on hidden curriculum and their impact on student gender roles. ResearchGate.
2. Casilao, L. B., & Salapa, A. C. (2024). Dual effects of social media on adolescent mental health: A systematic review on Philippine context. *Academia*.
3. Cochran, W. G. (2015). *Sampling techniques* (3rd ed.). Wiley.
4. Dreier, M., & Boyd, D. (2023). Social media as a space for emotional connection: Implications for adolescent well-being. *Journal of Adolescent Health, 72*(4), 345–352.
5. Du, X., & Wang, Q. (2024). Socially engaged learners and positive academic identity: Mediating effects of social media. *Educational Psychology Review, 36*(1), 112–130.
6. He, J., Deem, M., & Lee, R. (2015). Gen Z Social Media Engagement Survey: Development and validation. *Journal of Digital Learning Research, 8*(2), 45–62.
7. Khan, M. (2017). Social media engagement theory: Cognitive, behavioral, and emotional dimensions. *Journal of Social Media Studies, 4*(1), 1–18.
8. Marciano, L., et al. (2023). Positive online experiences and adolescent flourishing: A systematic review. *Journal of Youth and Adolescence, 52*(3), 601–618.
9. Nuevo, R. (2023). Social media and multiple dimensions of student engagement in Philippine schools. *Philippine Journal of Education, 102*(1), 45–60.
10. Salacut, F., et al. (2025). Digital equity in Philippine education: Social media access, performance, and mental health. *Asia-Pacific Education Review, 26*(1), 78–94.

11. Sanchez, M., & Jenkins, T. (2024). Lived socio-emotional experience and social media participation among pupils. *Social Media + Society*, 10(1), 1–14.
12. Steinsbekk, S., et al. (2024). Social media engagement and offline peer relationships in adolescence. *Developmental Psychology*, 60(2), 230–244.
13. Sundar, S. S., & Limperos, A. M. (2015). Uses and gratifications 2.0: New gratifications for new media. *Journal of Broadcasting & Electronic Media*, 57(4), 504–525.
14. Tennant, R., et al. (2007). The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): Development and UK validation. *Health and Quality of Life Outcomes*, 5(1), 63.