

Research Article

Social Media and Learning Motivation Among University Students: A Descriptive Study in Higher Education

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ABSTRACT

The rapid proliferation of social media platforms has fundamentally reshaped the informational and communicative landscape of higher education, raising critical questions about how digital participation intersects with students' academic motivation and learning behavior. While considerable scholarship has examined social media use in educational contexts, comparatively little empirical attention has been directed toward systematically describing the motivational dimensions of this relationship among undergraduate populations. This study addresses that gap by investigating the patterns of social media use and their perceived influence on learning motivation among university students. Employing a descriptive research design, data were collected from 320 undergraduate students across three faculties at a public university in Indonesia using a validated Likert-scale questionnaire supplemented by semi-structured reflective response forms. Descriptive statistics, frequency analysis, and thematic categorization were applied using SPSS 25 and NVivo 12. Findings reveal that the majority of students use social media daily for both academic and non-academic purposes, with YouTube, Instagram, and WhatsApp being the most frequently accessed platforms. A substantial proportion of respondents reported that social media positively influenced their intrinsic motivation, particularly through peer-to-peer knowledge sharing, access to supplementary learning resources, and exposure to academically relevant content. Concurrently, digital distraction and difficulty maintaining self-regulated learning behaviors were identified as significant challenges. These results carry substantive implications for pedagogical design, student digital literacy initiatives, and institutional policy in higher education. The study contributes to the growing empirical base on digital learning motivation and provides a contextually grounded descriptive framework for future inquiry.

Keywords: social media; learning motivation; university students; digital engagement; higher education

1. INTRODUCTION

Over the past two decades, social media has evolved from a niche communication tool to a pervasive infrastructure of social, cultural, and increasingly academic life. Among university students, platforms such as YouTube, Instagram, WhatsApp, TikTok, and Twitter now mediate significant portions of daily interaction, information seeking, and even collaborative learning. The scale of this shift is considerable: by 2019, estimates suggested that more than 90% of undergraduate students in many countries actively used at least one social media platform on a daily basis (Junco, 2012; Roblyer et al., 2010; Moran, Seaman, & Tinti-Kane, 2011). This pervasiveness has prompted educators and researchers to reconsider the boundaries between informal digital culture and formal academic learning environments.

The integration of digital technology into educational contexts has been accompanied by substantial theoretical and empirical attention across the fields of educational psychology, instructional design, and learning sciences. Scholars have argued that digital tools, when appropriately leveraged, can extend learning beyond the classroom, scaffold self-directed inquiry, and foster collaborative knowledge construction (Dabbagh & Kitsantas, 2012; Vygotsky's theoretical legacy as applied in constructivist digital contexts; Siemens, 2005). Social media, as a subset of these tools, occupies a particularly ambiguous position: it is simultaneously a potential learning resource and a source of competing distraction, a facilitator of academic community and a space for non-academic social performance (Kirschner & Karpinski, 2010; Junco, 2012).

Learning motivation represents one of the most extensively studied constructs in educational psychology, widely recognized as a determinant of academic persistence, engagement, and achievement (Ryan & Deci, 2000; Pintrich, 2003; Zimmerman, 2008). Within contemporary digital environments, questions about how motivational processes are shaped by

online social interaction have taken on renewed urgency. The emergence of social media as a daily presence in students' lives means that motivational influences now extend well beyond the physical classroom, encompassing a complex ecology of digital stimuli, peer networks, and algorithmically curated content (Manca & Ranieri, 2013; Prensky, 2010).

Despite a growing body of research on social media in education, several important gaps remain. Much of the existing literature concentrates on specific platform functionalities, particularly Facebook, or on narrowly defined outcome variables such as grade point averages (Junco, 2012; Kolek & Saunders, 2008). There is comparatively limited research that takes a holistic, descriptive approach to understanding students' subjective perceptions of how social media use shapes their motivational orientations, their academic engagement behaviors, and their capacities for self-regulation in digitally saturated learning environments. Furthermore, studies conducted in non-Western and developing-country higher education contexts remain underrepresented, despite the significant growth of social media use among university populations in these regions (Tess, 2013; Ractham & Firpo, 2011).

The relationship between social media and academic engagement is neither straightforward nor uniform. Some students leverage platforms to form study groups, access peer-generated summaries, and participate in discipline-specific communities of practice (Dabbagh & Kitsantas, 2012; Selwyn, 2012). Others report that the constant availability of social feeds, notifications, and entertainment content undermines sustained attention and intrinsic academic motivation (Junco & Cotten, 2012; Paul, Baker, & Cochran, 2012). This duality suggests that the impact of social media on learning motivation is mediated by individual differences in self-regulatory capacity, the specific platforms students choose to engage with, and the academic versus non-academic nature of their online activities.

Self-regulated learning (SRL), conceptualized by Zimmerman (2000) as a cyclical process encompassing goal setting, strategic planning, self-monitoring, and reflection, has been identified as a key moderator of the social media-motivation relationship. Students with stronger SRL tendencies tend to exploit the informational richness of social media while managing the distractions it presents, whereas students with lower regulatory capacities are more vulnerable to motivational displacement (Zheng, Niiya, & Warschauer, 2015; Barnard-Brak, Lan, & Paton, 2010). This observation points to the importance of not treating social media influence as homogeneous, but rather attending carefully to the heterogeneity of student profiles, motivational types, and regulatory strategies.

Academic engagement through online interaction has also been theorized in terms of social presence and community formation. Social media affords students a sense of connectedness to peers and instructors that may not be fully achievable through formal course management systems alone (Richardson & Swan, 2003; Garrison, Anderson, & Archer, 2010). This sense of belonging and peer accountability can function as a powerful extrinsic motivator, particularly for students who lack strong intrinsic orientations toward academic tasks. The relational dimensions of social media thus represent a potentially under-exploited pedagogical resource in higher education design.

Against this backdrop, the present study is motivated by a desire to provide empirically grounded, descriptive documentation of how university students in an Indonesian higher education context perceive and experience the relationship between social media use and learning motivation. By combining quantitative survey data with qualitative reflective responses, this study seeks to capture both the frequency and nature of social media engagement and the motivational meanings students ascribe to that engagement. Four research questions guide the inquiry: (1) How do university students perceive the role of social media in their learning activities? (2) How does social media use influence students' learning motivation? (3) What forms of academic engagement emerge through social media interaction? (4) What challenges do students experience in balancing academic and non-academic social media use? These questions collectively point toward an understanding of social media not merely as a technological tool but as a motivationally complex component of students' digital learning culture.

2. LITERATURE REVIEW

2.1 Social Media in Higher Education

Social media platforms have become deeply embedded in the daily routines of university students, fundamentally altering how information is sought, shared, and interpreted within academic communities. Boyd and Ellison's (2007) foundational definition of social network sites as web-based services that allow individuals to construct public profiles, articulate networks of connection, and traverse those networks remains highly relevant to understanding the educational implications of platforms that have evolved considerably since that definition was formulated. What is significant for higher education is that the participatory architecture of social media, characterized by ease of content creation, low barriers to information sharing, and persistent social connectivity, aligns, at least partially, with contemporary pedagogical ideals of active, collaborative, and student-centered learning (McLoughlin & Lee, 2010; Greenhow & Lewin, 2016).

Empirical investigations into social media use in higher education have produced a varied picture. Early studies, particularly those focused on Facebook adoption in US universities, found that students primarily used social media for social rather than academic purposes, with academic use representing a relatively minor proportion of overall activity

(Selwyn, 2009; Kolek & Saunders, 2008). However, subsequent research identified more nuanced patterns, noting that the boundary between social and academic uses is often fluid: students discuss course content, share lecture notes, and coordinate study sessions through the same platforms they use for entertainment and personal communication (Manca & Ranieri, 2013; Dabbagh & Kitsantas, 2012). This fluidity complicates attempts to categorically distinguish educational from non-educational social media behavior.

Research conducted across diverse international contexts has revealed significant variation in how students use social media for academic purposes, shaped by institutional cultures, disciplinary norms, and national digital infrastructure (Tess, 2013; Ractham & Firpo, 2011). In many Southeast Asian and South Asian higher education settings, WhatsApp and Telegram have emerged as primary tools for student-to-student and student-to-instructor academic communication, supplementing or in some cases replacing official learning management systems (Ahmad & Ashari, 2014; Amry, 2014). This platform plurality underscores the need for empirical research that attends to specific regional and institutional contexts rather than generalizing from Western or platform-specific data.

More recent scholarship has examined the role of social media in shaping academic identity and disciplinary socialization. Students who actively participate in subject-specific online communities, whether through Twitter hashtags, academic Facebook groups, or YouTube educational channels, appear to develop stronger senses of academic belonging and disciplinary identity, both of which are associated with higher levels of motivation and persistence (Pascarella & Terenzini, 2005; Tinto, 1987, as revisited in digital contexts by Thomas, 2012). This suggests that social media may contribute to learning motivation not only by providing informational resources but by facilitating the social and identity dimensions of academic engagement.

2.2 Learning Motivation in Digital Environments

Motivation theory has long occupied a central position in educational psychology, with researchers across decades identifying motivational orientation as one of the strongest predictors of academic performance, persistence, and deep learning (Pintrich, 2003; Eccles & Wigfield, 2002; Hidi & Renninger, 2006). Two broad motivational orientations, intrinsic and extrinsic, have received sustained theoretical and empirical attention. Intrinsic motivation, characterized by engagement driven by genuine interest, curiosity, and the inherent satisfaction of learning, has been consistently associated with deeper processing, greater persistence, and higher quality outcomes (Ryan & Deci, 2000; Lepper, Corpus, & Iyengar, 2005). Extrinsic motivation, driven by external rewards, social recognition, or the avoidance of negative outcomes, can support learning under certain conditions but is generally less associated with deep engagement (Deci, Koestner, & Ryan, 1999).

Self-Determination Theory (SDT), developed by Ryan and Deci (2000), provides one of the most robust theoretical frameworks for understanding motivation in digital learning environments. SDT posits that human motivation is sustained and directed by the satisfaction of three basic psychological needs: autonomy, competence, and relatedness. Social media environments, with their affordances for self-directed exploration, participatory content creation, and social connection, have the potential to satisfy all three needs, at least in principle. Students who use social media to seek out information that extends beyond assigned coursework exhibit autonomous motivational orientations; those who engage in peer teaching or collaborative online problem-solving develop and demonstrate competence; and those who participate in online academic communities satisfy their need for relatedness (Dabbagh & Kitsantas, 2012; Junco, 2012).

However, the motivational effects of digital environments are not uniformly positive. Research has consistently identified digital distraction as a significant threat to sustained academic motivation, particularly in contexts where social media is accessed during study sessions or academic tasks (Junco & Cotten, 2012; Paul et al., 2012). The intermittent reinforcement schedule of social media notifications, likes, and new content is known to engage attentional and reward-processing systems in ways that compete directly with cognitively demanding academic work (Alter, 2017; Fogg, 2009). This attentional competition can undermine not only academic performance but the experience of intrinsic motivation itself, fragmenting the sustained engagement necessary for deep learning.

2.3 Self-Regulated Learning and Social Media

Self-regulated learning (SRL) encompasses the metacognitive, motivational, and behavioral processes through which learners set academic goals, plan and monitor their learning strategies, and evaluate their progress toward desired outcomes (Zimmerman, 2000; Pintrich, 2004). SRL has been conceptualized as a cyclical, recursive process rather than a linear one, involving constant adjustment and reflection in response to learning experiences. Within digitally mediated learning environments, SRL capacities have taken on heightened importance, given the degree of self-direction required to navigate the abundant, unstructured, and often distracting information landscape of the internet and social media (Dabbagh & Kitsantas, 2012; Barnard-Brak et al., 2010).

Research specifically examining SRL in social media contexts has found that students with higher levels of self-regulatory capability tend to use social media more strategically for academic purposes, setting explicit intentions for their

online activities, monitoring the time they spend on non-academic content, and reflecting on the relevance of information encountered online to their academic goals (Zheng et al., 2015; Kitsantas & Dabbagh, 2011). Conversely, students with lower SRL tend to approach social media reactively rather than proactively, following the flow of algorithmically curated content without clear academic purpose, and experiencing greater difficulty disengaging from social media when academic tasks demand attention. These differences suggest that SRL instruction may be an important complement to any pedagogical strategy that incorporates social media.

The relationship between SRL and social media is further complicated by platform-specific affordances. Platforms that support asynchronous, text-based communication, such as discussion forums embedded within learning management systems or academic Facebook groups, may be more conducive to reflective, metacognitive engagement than highly visual, algorithmically driven platforms like Instagram or TikTok (Manca & Ranieri, 2016). This platform specificity underscores the importance of attending not merely to social media use in general but to the particular platforms and use patterns that characterize students' digital learning behaviors.

2.4 Digital Communication and Academic Engagement

Academic engagement, understood as the quality and intensity of students' cognitive, behavioral, and emotional investment in their learning, has been identified as a mediating variable between institutional inputs and student outcomes in higher education (Kuh, 2009; Fredricks, Blumenfeld, & Paris, 2004). The advent of social media has created new affordances for academic engagement that extend well beyond the formal classroom or scheduled contact hours. Online discussion groups, peer mentoring networks, and collaborative document editing platforms can sustain academic engagement across temporal and spatial boundaries, potentially enriching the overall learning experience for students who participate actively (Richardson & Swan, 2003; Tinto, 1987).

Communication within digital academic communities exhibits characteristics distinct from face-to-face interaction, including asynchronicity, the removal of physical social cues, and the persistence of textual records. These characteristics can be both enabling and constraining: the removal of physical social hierarchies may encourage more equitable participation from students who are reticent in face-to-face contexts, while the absence of immediate feedback and social presence can diminish the emotional warmth and responsiveness that sustain motivated engagement over time (Garrison et al., 2010; Richardson & Swan, 2003). Designing effective social media-mediated learning communities requires attending carefully to these communicative dynamics.

The concept of communities of practice, as theorized by Lave and Wenger (1991) and extended to digital contexts by various scholars, offers a useful lens for understanding how students' participation in social media communities can scaffold academic identity development and motivational engagement. Students who move from peripheral to more central participation in online disciplinary communities, contributing content, responding to peers, and engaging critically with shared resources, undergo a form of legitimate peripheral participation that supports both cognitive and motivational development. This theoretical framing highlights the importance of not treating social media merely as an information delivery tool but as a potentially transformative space for academic socialization.

2.5 Emerging Trends in Digital Student Culture

The concept of the 'digital native,' introduced by Prensky (2001) and subsequently challenged and refined by numerous scholars (Bennett, Maton, & Kervin, 2008; Helsper & Eynon, 2010), draws attention to generational shifts in students' relationships with technology, information, and learning. While the strong version of the digital native hypothesis, which portrays contemporary students as uniformly fluent and comfortable with digital technologies, has been largely discredited by empirical research showing substantial variation in students' digital competencies and preferences, it remains true that current undergraduate cohorts have grown up with pervasive internet access and social media in ways that previous generations did not (Selwyn, 2012; Margaryan, Littlejohn, & Vojt, 2011). Understanding how this generational context shapes learning motivation and academic behavior is therefore an important area of inquiry.

A growing body of research has examined the phenomenon of media multitasking, the simultaneous engagement with multiple media streams or concurrent switching between academic and social media activities, as a characteristic feature of contemporary student digital behavior (Ophir, Nass, & Wagner, 2009; Carrier, Rosen, Cheever, & Lim, 2015). The evidence on multitasking and academic performance is largely cautionary: studies consistently find that concurrent social media use during study sessions is associated with reduced comprehension, attention fragmentation, and diminished academic motivation (Junco & Cotten, 2012; Kuznekoff & Titsworth, 2013). These findings have important implications for how students are supported in developing digital learning habits that maximize the benefits of social media while mitigating its attentional costs.

Media ecology theory, as developed by Postman (1985) and McLuhan (1964) and applied to digital contexts by contemporary scholars (Strate, 2017), provides a broader framework for understanding the cultural and cognitive consequences of social media immersion. From an ecological perspective, social media does not merely transmit content

but reshapes the informational environments in which learning occurs, altering the pace, depth, and social character of information processing. Students who are deeply embedded in social media ecosystems may develop particular cognitive and motivational tendencies, including preferences for visual and fragmented information, heightened sensitivity to social feedback, and decreased tolerance for the sustained, solitary effort required by traditional academic tasks (Carr, 2010; Rosen, Carrier, & Cheever, 2013). These ecological effects, while not deterministic, represent an important backdrop against which the relationship between social media and learning motivation must be understood.

3. METHOD

3.1 Research Design and Setting

This study employed a descriptive research design, selected for its appropriateness in systematically documenting the characteristics, patterns, and perceptions of a defined population without intervention or experimental manipulation (Creswell, 2012; Fraenkel, Wallen, & Hyun, 2012). The descriptive approach is well suited to the present research aims, which seek to characterize students' social media use patterns and their perceived motivational effects rather than to establish causal relationships. The study was conducted at a public university in Banda Aceh, Indonesia, selected on the basis of its representative student population, institutional willingness to participate, and the researchers' established access to relevant faculty structures.

Data collection took place over a twelve-week period during the 2018-2019 academic year, spanning both mid-semester and end-of-semester phases to capture potential temporal variation in social media use and motivational experiences. The study encompassed three faculties: the Faculty of Education, the Faculty of Social Sciences, and the Faculty of Science and Technology, selected to ensure cross-disciplinary representation. Ethical approval was obtained from the university's institutional review board prior to data collection. All participants provided informed written consent, and anonymity was maintained throughout the study.

3.2 Participants and Sampling

The target population comprised undergraduate students currently enrolled in the second, fourth, or sixth semester, excluding first-semester students who may not yet have established stable academic patterns. A stratified random sampling procedure was employed to ensure proportional representation across faculties and genders. A total of 320 students were recruited, with a final valid response rate of 96.6% ($n = 309$) after excluding incomplete or inconsistent submissions. Participants ranged in age from 18 to 24 years, with a mean age of 20.4 years ($SD = 1.2$). The gender distribution was 58.3% female and 41.7% male. **Table 1** presents the full demographic profile of participants.

Table 1. Participant Demographics ($N = 309$)

Faculty	n	%	Gender (F/M)
Education	112	36.2	67/45
Social Sciences	104	33.7	58/46
Science & Technology	93	30.1	55/38
Total	309	100.0	180/129

Note. F = Female; M = Male.

3.3 Instrumentation and Data Collection

Two primary instruments were employed. The first was a 42-item Likert-scale questionnaire developed from validated scales in existing literature, comprising four sub-scales: (a) Social Media Use Patterns (10 items; adapted from Junco, 2012), (b) Academic versus Non-Academic Social Media Behavior (8 items; adapted from Manca & Ranieri, 2013), (c) Learning Motivation Orientations (16 items; adapted from Ryan & Deci, 2000, Intrinsic Motivation Inventory subscales), and (d) Perceptions of Social Media for Learning (8 items). Response options ranged from 1 (Strongly Disagree) to 5 (Strongly Agree). The second instrument was a semi-structured reflective response form containing four open-ended prompts designed to elicit qualitative descriptions of students' social media learning experiences.

Content validity was established through expert review by three senior academics in educational technology and educational psychology, who assessed item relevance, clarity, and coverage. A pilot study was conducted with 35 students not included in the main study, after which five items were revised and two were removed based on clarity feedback and initial item-total correlation analysis. Cronbach's Alpha coefficients for the four sub-scales were 0.84, 0.79, 0.91, and 0.82 respectively, all exceeding the commonly accepted threshold of 0.70 (Nunnally, 1978). **Table 2** presents full validity and reliability statistics.

Table 2. Questionnaire Validity and Reliability Results

Sub-Scale	Items	Factor Loading Range	Cronbach's Alpha	Status
Social Media Use Patterns	10	.54 - .81	.84	Valid & Reliable
Academic/Non-Academic Behavior	8	.49 - .76	.79	Valid & Reliable
Learning Motivation Orientations	16	.61 - .88	.91	Valid & Reliable
Perceptions Toward SM for Learning	8	.52 - .79	.82	Valid & Reliable

Note. SM = Social-Media. Factor loadings derived from exploratory factor analysis (principal axis factoring).

3.4 Data Analysis

Quantitative data were analyzed using SPSS version 25, with descriptive statistical procedures including means, standard deviations, frequency distributions, and percentage analyses computed for all scale items and composite sub-scale scores. Qualitative reflective responses were imported into NVivo 12 and subjected to thematic analysis following the six-phase framework proposed by Braun and Clarke (2006): familiarization, initial coding, theme generation, theme review, theme naming, and report writing. Two researchers independently coded a randomly selected 30% of responses; inter-rater reliability was assessed using Cohen's kappa coefficient ($k = 0.78$), indicating substantial agreement. Discrepancies were resolved through discussion and consensus.

4. RESULTS AND DISCUSSION

4.1 Social Media Use Patterns

The descriptive analysis of social media use revealed that 91.3% of participants reported using social media daily, with 62.5% indicating usage of more than three hours per day. WhatsApp was the most universally adopted platform (98.7% of respondents), followed by YouTube (87.7%), Instagram (82.2%), Facebook (61.2%), Twitter (44.0%), and TikTok (38.8%). These usage patterns are broadly consistent with regional digital trends documented in similar Southeast Asian higher education contexts (Ractham & Firpo, 2011; Ahmad & Ashari, 2014). **Table 3** presents the full frequency distribution of platform use.

Table 3. Social Media Platform Usage Frequency (N = 309)

Platform	Daily (%)	Weekly (%)	Monthly (%)	Never (%)
WhatsApp	98.7	1.0	0.3	0.0
YouTube	87.7	9.7	2.3	0.3
Instagram	82.2	12.3	3.9	1.6
Facebook	61.2	22.7	10.0	6.1
Twitter	44.0	28.2	16.8	11.0
TikTok	38.8	31.4	18.4	11.4

Note. Percentages indicate the proportion of participants accessing each platform at the specified frequency.

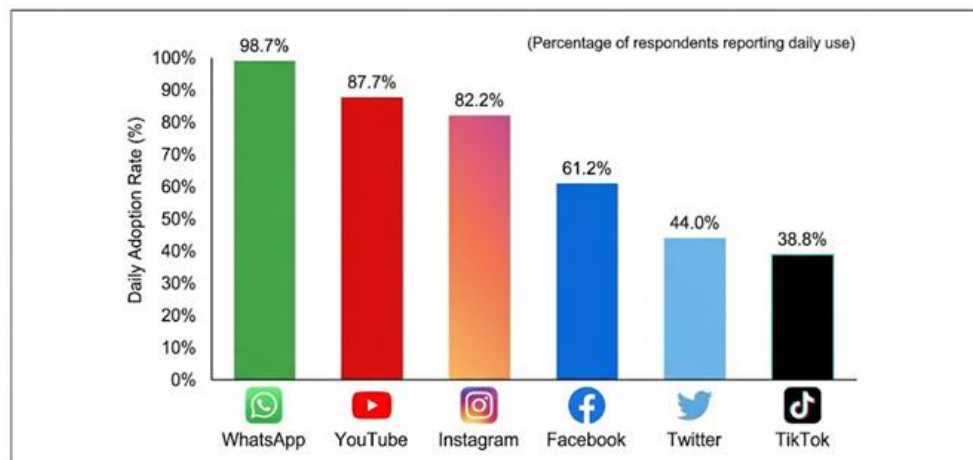


Figure 1. Daily Social Media Platform Adoption Rate (N = 309). Platform ranking based on daily use frequency reported by survey respondents.

4.2 Academic versus Non-Academic Social Media Use

A critical finding concerns the distribution of academic versus non-academic social media activities. The majority of respondents (74.1%) reported using WhatsApp specifically for academic group coordination, including sharing lecture materials, coordinating assignment deadlines, and clarifying course content. YouTube was primarily used for accessing educational tutorials and supplementary subject content by 68.9% of respondents. Instagram and TikTok, by contrast, were predominantly associated with entertainment and social interaction, with fewer than 20% of respondents identifying these platforms as regular academic resources. These patterns are consistent with the platform-specific use differentiation documented by Manca and Ranieri (2013, 2016), who found that students tend to compartmentalize academic and social functions across different platforms rather than using any single platform comprehensively for academic purposes.

4.3 Learning Motivation: Descriptive Statistics

The learning motivation sub-scale yielded an overall mean score of 3.61 (SD = 0.58) on a five-point scale, indicating a moderately positive motivational orientation among the sample. Analysis of the individual SDT-derived subscales revealed that social media-related competence satisfaction registered the highest mean score ($M = 3.84$, $SD = 0.61$), followed by relatedness satisfaction ($M = 3.72$, $SD = 0.63$), and autonomy satisfaction ($M = 3.45$, $SD = 0.71$). These findings are consonant with SDT predictions that social media environments may be particularly effective at satisfying students' needs for competence and social connectedness, while having a more variable effect on autonomous motivational orientations (Ryan & Deci, 2000; Dabbagh & Kitsantas, 2012). **Table 4** provides full descriptive statistics.

Table 4. Descriptive Statistics of Learning Motivation Sub-Scales (N = 309)

Sub-Scale	M	SD	Min	Max
Intrinsic Motivation (Interest/Enjoyment)	3.68	0.64	1.50	5.00
Competence Satisfaction	3.84	0.61	1.75	5.00
Relatedness Satisfaction	3.72	0.63	1.50	5.00
Autonomy Satisfaction	3.45	0.71	1.25	5.00
Perceived Distraction (Negative)	3.58	0.76	1.00	5.00
Overall Motivation Composite	3.61	0.58	1.50	5.00

Note. M = Mean; SD = Standard Deviation. All items scored on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).

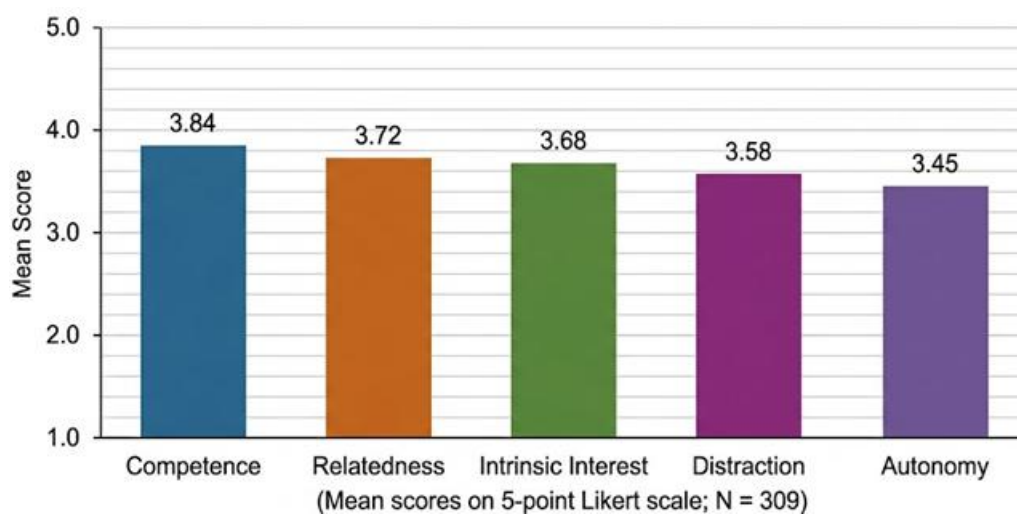


Figure 2. Mean scores across learning motivation sub-scales. Values represent composite subscale means illustrating the relative strength of each motivational dimension.

4.4 Student Perceptions Toward Academic Social Media Use

Table 5. Student Perceptions Toward Academic Social Media Use (N = 309)

Perception Item	SA+A (%)	N (%)	SD+D (%)	M (SD)
Social media supports my learning	78.6	12.9	8.5	3.85 (0.72)
Social media improves my motivation	71.2	17.5	11.3	3.72 (0.80)
I use social media to find academic resources	80.3	11.7	8.0	3.88 (0.69)
Social media distracts me from studying	67.6	18.1	14.3	3.61 (0.84)
Peer interaction via social media motivates me	73.8	16.8	9.4	3.76 (0.77)

Note. SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree. M = Mean; SD = Standard Deviation.

4.5 Qualitative Themes from Reflective Responses

Table 6. Major Themes, Sub-Themes, and Interpretations from Reflective Responses

Theme	Sub-Themes	Illustrative Student Response
Motivational Support	Peer inspiration; access to resources; academic community	"Seeing my classmates share their study notes on WhatsApp makes me want to prepare better for class."
Digital Distraction	Notification interruption; media multitasking; time displacement	"I often open Instagram to relax for a few minutes and then realize an hour has passed."
Collaborative Learning	Group problem-solving; peer teaching; shared content curation	"Our study group on WhatsApp is essential. We explain concepts to each other at midnight before exams."
Self-Regulation Challenges	Difficulty managing screen time; goal displacement; low monitoring	"I know I should stop scrolling and study, but the algorithm keeps showing me things I want to watch."
Academic Identity	Professional networking; disciplinary community; career aspiration	"Following academics and researchers on Twitter made me realize what it means to be part of a scholarly community."

Note. All quotations are drawn from reflective response forms and presented verbatim with minor grammatical editing for readability.

4.6 Research Framework and Conceptual Model

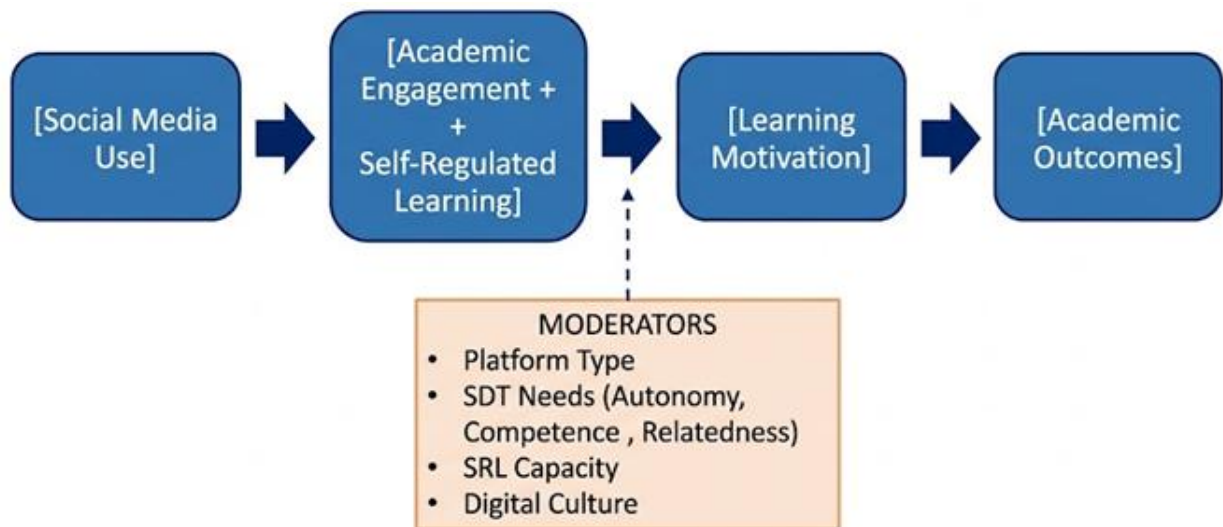


Figure 3. Research framework integrating Social Media Use, Self-Determination Theory, Self-Regulated Learning, and Academic Outcomes within a digital higher education context.

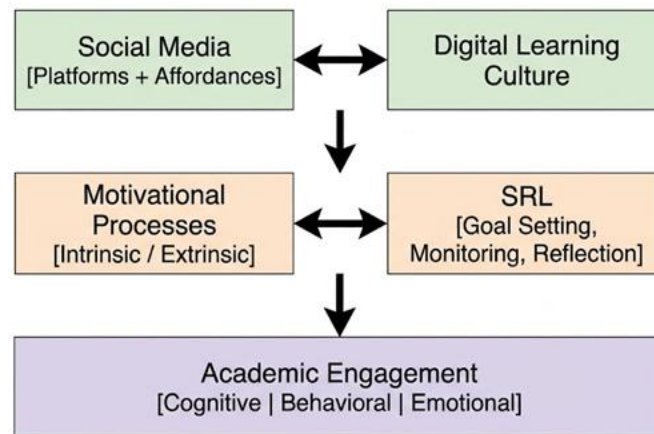


Figure 4. Conceptual framework illustrating the dynamic interplay between social media use, motivational processes, and academic engagement in higher education, mediated by digital culture and SRL capacities.

4.7 Discussion

The findings of this study collectively illuminate a motivationally complex and contextually situated relationship between social media use and learning motivation among university students. The high prevalence of daily social media use documented here is consistent with the broader trajectory of digital adoption in Southeast Asian higher education (Ractham & Firpo, 2011; Ahmad & Ashari, 2014), and the platform distribution, with WhatsApp and YouTube serving as the primary academic use tools, reflects the pragmatic appropriation of available digital infrastructure rather than any deliberate institutional design. This organic emergence of social media as academic infrastructure has important implications: it suggests that students are already enacting a form of informal digital learning ecosystem, albeit one that lacks the pedagogical scaffolding and intentional structure that more formal integration might provide (Dabbagh & Kitsantas, 2012; Selwyn, 2012).

The moderately positive motivational profiles observed across SDT-derived subscales are theoretically meaningful. The relative strength of competence and relatedness satisfaction over autonomy satisfaction aligns with the social and informational affordances of social media: platforms that facilitate peer comparison, collaborative problem-solving, and community membership are naturally more likely to satisfy needs for competence and belonging than needs for autonomous self-direction, which are better supported by platforms or activities that allow for sustained, goal-directed inquiry without social interruption (Ryan & Deci, 2000; Dabbagh & Kitsantas, 2012). The comparatively lower autonomy scores may also reflect the extent to which social media use among students is reactive, driven by platform algorithms and social norms rather than by students' own deliberate academic intentions.

The duality documented in students' perceptions, with large majorities endorsing both the motivational benefits and the distracting effects of social media, reflects a tension that runs throughout the empirical literature on this topic (Junco, 2012; Kirschner & Karpinski, 2010; Paul et al., 2012). Many students in this study perceived social media as both a motivational resource and a source of distraction during academic activities. This simultaneous endorsement is not contradictory but rather reflects the genuinely ambivalent nature of social media's relationship to learning motivation: the same platform features that enable peer collaboration and resource sharing also enable the consumption of entertainment content and social performance that can displace academic engagement. Addressing this duality requires more than institutional prohibitions on social media use; it demands the development of students' metacognitive and self-regulatory capacities.

The qualitative themes provide important texture to the quantitative patterns. The theme of collaborative learning, supported by student responses describing nocturnal WhatsApp study groups and peer-to-peer concept explanation, resonates strongly with Vygotsky's theoretical emphasis on social interaction as a driver of cognitive development and with more contemporary constructivist accounts of collaborative online learning (Greenhow & Lewin, 2016; Richardson & Swan, 2003). The academic identity theme, in which students described following academic social media accounts as a means of disciplinary socialization, aligns with the communities of practice framework and suggests that social media may support not only instrumental learning activities but the longer-term development of academic self-concept and scholarly motivation.

The self-regulation challenges documented here are consistent with the broader literature on digital distraction and SRL in online environments (Zimmerman, 2000; Zheng et al., 2015; Ophir et al., 2009). Students' descriptions of

algorithmic capture, the experience of intending brief social media visits that expand into extended non-academic sessions, speak to the deliberate design of engagement-maximizing platform features and the cognitive demands these impose on self-regulatory systems. These findings underscore the importance of integrating SRL instruction into higher education curricula, particularly instruction that specifically addresses digital self-management and the metacognitive recognition of social media's attentional dynamics.

From a pedagogical standpoint, the findings suggest that faculty and institutional designers would benefit from working with the grain of students' existing social media behaviors rather than against them. Given that WhatsApp and YouTube are already functioning as informal academic support tools, there is clear potential for more intentional pedagogical structuring of these platforms within course designs, for instance through instructor-moderated WhatsApp groups with explicit academic norms, or the curation of YouTube playlists as supplementary learning resources. Such structured integration would align with McLoughlin and Lee's (2010) concept of a 'pedagogy 2.0' that harnesses the participatory affordances of social media for educationally productive ends while supporting students' development of the regulatory capacities needed to manage those environments effectively.

It is also worth noting that the findings bear on debates about the appropriate boundaries of instructors' digital responsibilities. If social media is already a *de facto* component of students' learning environments, then instructors who ignore this reality may be missing significant opportunities to scaffold effective academic engagement, while those who engage with it thoughtfully, attending to both its motivational potential and its distracting risks, may be better positioned to support holistic student development. This does not imply that faculty must become social media experts, but it does suggest that digital learning awareness should be a component of professional development for academics in contemporary higher education.

Several limitations of the present study warrant acknowledgment. The sample, while reasonably sized and stratified, is drawn from a single Indonesian university, limiting the generalizability of findings to other national and institutional contexts. The cross-sectional design precludes causal inference, and the reliance on self-report measures introduces the possibility of social desirability bias, particularly in students' descriptions of their academic versus non-academic social media use. Future research employing longitudinal designs, objective platform analytics, or experience sampling methods would provide a richer and more accurate picture of the motivational dynamics examined here.

5. CONCLUSION AND IMPLICATIONS

This study set out to describe, in empirically grounded and theoretically informed terms, the relationship between social media use and learning motivation among undergraduate students at a public university in Indonesia. The findings converge on a picture of moderated but real motivational significance: social media is neither a panacea for academic disengagement nor a straightforward threat to academic motivation, but rather a motivationally ambivalent digital environment whose effects depend substantially on how it is used, by whom, and with what degree of self-regulatory intentionality. The answers to the four research questions posed at the outset are broadly affirmative: students do perceive social media as a meaningful component of their learning environment; social media use does influence learning motivation, primarily through competence and relatedness satisfaction; identifiable forms of academic engagement emerge through social media interaction; and digital distraction represents a genuine and widely experienced challenge to motivational consistency.

The theoretical contribution of this study lies in its application of Self-Determination Theory and Self-Regulated Learning frameworks to a non-Western, Southeast Asian higher education context, where the specific platforms and cultural norms of social media use differ meaningfully from those documented in much of the existing literature. The dominance of WhatsApp as an academic communication tool, for instance, reflects a contextually specific pattern of platform adoption that deserves greater attention in the global literature on educational social media use. More broadly, the study contributes to the empirical base on digital learning motivation by providing descriptive data from a large, faculty-diverse sample collected through both quantitative and qualitative instruments, offering a more multi-dimensional account of the social media-motivation relationship than single-instrument studies typically permit.

The pedagogical implications of these findings are substantial. First, higher education institutions should invest in structured digital literacy programs that equip students not merely with technical competencies but with the metacognitive and self-regulatory skills needed to use social media productively and manage its attentional demands. Second, instructors should consider how they might deliberately harness the platforms students already use, particularly WhatsApp and YouTube, in service of specific academic purposes, while establishing clear norms about academic versus non-academic use within course-related digital spaces. Third, student support services should attend to the motivational dimensions of students' digital lives, recognizing that excessive social media consumption may be a symptom of motivational dysregulation rather than its cause.

The study's limitations, including its single-institution sample, cross-sectional design, and reliance on self-report measures, should be taken into account when interpreting and generalizing the findings. Future research should seek to address these limitations through longitudinal designs, multi-institutional comparative studies, and the integration of objective digital trace data alongside self-report instruments. Despite these constraints, the present study offers a methodologically transparent and theoretically grounded contribution to the growing scholarship on social media, motivation, and learning in contemporary higher education.

Ultimately, the challenge facing higher education in the digital age is not whether social media will play a role in students' academic lives, but how that role can be shaped in ways that are educationally productive and motivationally supportive. This study suggests that the answer lies not in the platforms themselves but in the pedagogical, institutional, and individual resources that frame how those platforms are used. Cultivating digitally aware, self-regulated, and intrinsically motivated learners requires attending thoughtfully to the complex motivational landscape that social media has created, and responding with the kind of empirically informed, pedagogically sophisticated design that this landscape demands.

SUGGESTIONS FOR FUTURE RESEARCH

The present study opens several avenues for further empirical investigation that would deepen the field's understanding of social media's role in student motivation and digital learning culture. Most pressing is the need for longitudinal research that tracks changes in students' motivational orientations and social media use patterns over the course of their undergraduate education. Cross-sectional snapshots, while valuable for descriptive purposes, cannot capture the motivational trajectories of students as they encounter diverse academic challenges, develop their self-regulatory capacities, and move through different phases of disciplinary socialization. Longitudinal designs would also permit examination of whether and how instructional interventions targeting digital self-regulation produce durable changes in motivational outcomes.

A second important direction concerns the comparative investigation of social media and learning motivation across different generational cohorts, disciplinary cultures, and national higher education contexts. The growing presence of Generation Z students in universities brings new patterns of social media engagement, particularly with short-form video platforms such as TikTok, that have not yet been systematically studied in relation to academic motivation. Comparative studies that examine how motivational patterns differ across cohorts, disciplines, and institutional settings would contribute substantially to the theoretical refinement of existing frameworks and to the design of contextually appropriate educational interventions. Cross-cultural studies comparing Southeast Asian, East Asian, African, and Western higher education contexts would be particularly valuable in moving the field beyond its current overrepresentation of Western, English-language data.

Emerging technologies also merit dedicated attention. The integration of artificial intelligence into social learning environments, through AI-driven content recommendation, adaptive learning platforms, and intelligent tutoring systems, raises new questions about how algorithmic mediation shapes students' motivational experiences. Research examining how AI-augmented social media environments influence intrinsic motivation, goal orientation, and academic identity would be both theoretically generative and practically relevant. Similarly, questions about digital well-being, the relationship between social media use intensity, emotional regulation, and academic motivation, represent an underexplored but critically important area for future inquiry. As immersive learning platforms and extended reality technologies become more accessible in higher education, researchers will need to examine how the boundaries between social, recreational, and academic digital experience are further dissolved, and what implications this dissolution carries for student motivation, engagement, and holistic development.

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