



Digital Well-Being and Academic Resilience among University Students: The Mediating Role of Self-Regulated Learning

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Article History:

Received: 02 December 2025

Revised: 14 February 2026

Accepted: 10 March 2026

Keywords:

Digital Well-Being; Academic Resilience; Self-Regulated Learning; University Students

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Abstract :

This study aims to examine the relationship between digital well-being and academic resilience among university students, with particular attention to the role of self-regulated learning as a mediating mechanism. A qualitative case study design was employed at STAIAS Situbondo, Indonesia. Data were collected through in-depth interviews, observations, and documentation involving purposively selected students and relevant academic personnel. Data were analyzed through data condensation, data display, and conclusion drawing and verification, while credibility was established through source and technique triangulation, member checking, and peer discussion. The findings indicate that digital well-being supports academic resilience by enabling students to establish digital boundaries, control distractions, maintain psychological balance, and sustain academic engagement. Self-regulated learning emerged as a central mechanism through which students transformed healthy digital practices into adaptive learning behaviors, including goal setting, time management, self-monitoring, strategy modification, and persistence. The study concludes that digital well-being and self-regulated learning jointly strengthen students' academic resilience. The findings imply that universities should integrate digital well-being and self-regulated learning interventions into student-support programs.

INTRODUCTION

The rapid expansion of digital technology has transformed university students' academic lives, making digital platforms essential for communication, information access, collaboration, and learning (Anlı, 2025; Khan, Dean, Ridge, & Souvlakis, 2025). This transformation creates substantial opportunities, but it also introduces psychological challenges concerning how students manage their digital environments while maintaining academic functioning (Arif, 2024; Pol, Castrechini-Trotta, Pellicer-Cardona, & Cañete-Massé, 2024). Digital well-being therefore represents an increasingly important societal issue because students' ability to use technology without experiencing excessive distraction, fatigue, or loss of control may influence their psychological and educational outcomes (Hochreiter, Benedetto, & Loesch, 2022). Recent evidence indicates that digital fatigue can significantly undermine academic resilience among university students, while resilience remains an important

psychological resource for sustaining academic functioning under challenging conditions (Akbayram & Keten, 2024; Kim & Sohn, 2024). Thus, promoting digital well-being should not be understood merely as encouraging healthier technology use, but as developing psychological capacities that enable students to remain adaptive, persistent, and academically engaged within increasingly digital learning environments.

The general problem emerges from the tension between the educational benefits of digital connectivity and the psychological costs associated with intensive technology use. University students are expected to navigate multiple digital platforms, manage continuous academic information, respond to online communication, and independently organize their learning (Darmawan, Sukoco, Marhaendro, Septiyanto, & Hartanto, 2025; Mahrudin, Ginanjar, Rahman, Suherman, & Maryani, 2025). Without adequate psychological regulation, these demands may contribute to distraction, digital fatigue, reduced concentration, and difficulties maintaining academic persistence. Such challenges become particularly important because university learning requires greater autonomy than earlier educational levels (Aini, Baharun, Wahid, Manshur, & Mundiri, 2024; Hidayat et al., 2024). Students must determine learning goals, monitor their progress, manage their time, and regulate their behavior without continuous external supervision. Existing evidence demonstrates that self-regulated learning is closely connected with students' resilience and academic functioning. Consequently, the problem is not simply whether students use digital technology frequently, but whether they possess sufficient psychological resources to manage digital demands while sustaining adaptive academic behavior.

The phenomenon can be observed in the increasingly blurred boundaries between students' academic activities and their everyday digital lives. Smartphones, learning management systems, social media, messaging applications, video platforms, and online information sources simultaneously function as educational resources and potential sources of distraction (Muslikah et al., 2026; Riamanda, Syahara.Z, & Yazid, 2025). Students may move rapidly between academic tasks and non-academic digital activities, creating difficulties in sustaining attention and regulating learning behavior. Recent research involving university students has shown that digital fatigue is negatively associated with academic resilience, suggesting that excessive digital demands can weaken students' capacity to cope with academic challenges (Anapah, Al Musadieq, & Ruhana, 2026; Benito, Jiménez-Murcia, Tirado-Muñoz, & Adan, 2026; Chen, Wang, & Gao, 2024). At the same time, research on university students in hybrid learning contexts has identified a positive relationship between self-regulated learning and academic resilience. These findings indicate that the contemporary student experience requires more than digital competence; it requires psychological mechanisms that allow students to regulate their engagement with technology and maintain resilience when academic pressures and digital demands converge.

Previous research has established that academic resilience is an important psychological resource for students confronting academic difficulties, while self-regulated learning provides behavioral and cognitive mechanisms for managing learning demands. For example, a 2025 study of college students found that resilience was associated with online-learning emotional engagement and that self-regulated learning efficacy and regulatory strategies helped explain this relationship (Faizah, Susanti, & Sandy, 2026; Usher et al., 2024). Similarly, research using a longitudinal weekly design demonstrated that self-regulation behaviors mediated the relationship between resilience and academic performance, with the effect strengthened by grit and social

support. These studies strengthen the argument that resilience and self-regulation should be examined as interconnected psychological processes rather than isolated predictors (Soucie et al., 2024). However, much of this literature has concentrated on academic performance, emotional engagement, or resilience itself, while comparatively less attention has been directed toward digital well-being as an antecedent of academic resilience. This limitation leaves an important question concerning how students' psychological functioning in digital environments translates into adaptive academic capacity.

Recent studies have also begun to examine self-regulated learning as a mechanism connecting students' psychological resources with academic outcomes. Evidence from Indonesian and Turkish students, for instance, showed that self-regulated learning mediated the relationship between family social support and academic resilience. Research in Ghana similarly demonstrated that self-regulated learning partially mediated relationships involving academic resilience and academic well-being. Although these findings provide strong support for the mediating importance of self-regulation, they leave a conceptual gap concerning the digital context in which contemporary university students increasingly learn and interact (Mustofa, 2022; Nashit, 2025). Existing studies tend to examine resilience, self-regulation, academic well-being, social support, or digital fatigue separately. Consequently, there remains insufficient empirical explanation of whether digital well-being contributes to academic resilience and, more importantly, whether this contribution operates through students' capacity to regulate their own learning. Addressing this gap is important for developing psychologically informed interventions in higher education.

The state of the art of this study lies in integrating digital well-being, academic resilience, and self-regulated learning within a single explanatory framework. Rather than treating digital technology merely as an external educational tool or viewing digital fatigue as an isolated psychological problem, this study conceptualizes students' digital well-being as a potential psychological resource associated with adaptive academic functioning (Esterina, Hidayati, & Wicaksono, 2025; Syahir, Abidin, Sa'ari, & Mukaffa, 2025). The proposed model positions digital well-being as an independent variable, academic resilience as the outcome, and self-regulated learning as a mediating mechanism. This approach extends previous research that has demonstrated relationships among resilience, self-regulation, and academic outcomes but has paid comparatively limited attention to the psychological quality of students' digital lives. The novelty is therefore not simply the inclusion of three established constructs, but the explanation of how healthy digital functioning may be translated into academic resilience through students' ability to plan, monitor, control, and adapt their learning behavior.

The importance of resolving this issue becomes clearer because interventions aimed solely at reducing technology use may overlook the psychological competencies that students need to function effectively in digital learning environments. A more useful applied-psychological perspective is to identify whether digital well-being can strengthen students' resilience and whether this effect depends on self-regulated learning. Such knowledge can inform universities, counselors, lecturers, and student-support services in designing interventions that move beyond generic recommendations for reducing screen time toward strategies that strengthen adaptive digital behavior and learning regulation. Recent findings indicate that self-regulation is a meaningful protective mechanism in academic contexts, while digital fatigue may negatively affect

resilience. Therefore, investigating the mediating role of self-regulated learning can provide a more actionable explanation of students' psychological adaptation to digital learning environments and generate evidence relevant to educational and psychological practice.

Based on this research gap, the central research problem is whether digital well-being significantly contributes to university students' academic resilience and whether self-regulated learning mediates this relationship. The underlying argument is that students who experience healthier and more balanced digital functioning may have greater psychological capacity to concentrate, manage digital demands, and maintain adaptive learning behaviors when facing academic difficulties. However, this potential relationship is unlikely to operate entirely through a direct pathway. Students' digital well-being may first facilitate stronger self-regulatory capacities, enabling them to establish learning goals, control distractions, monitor progress, manage time, and adjust strategies when difficulties arise. These regulatory processes can subsequently strengthen academic resilience by helping students persist and recover from academic setbacks. Thus, this study proposes that self-regulated learning functions as a psychological mechanism linking digital well-being with academic resilience, providing an empirically testable explanation with direct implications for psychological and educational intervention.

RESEARCH METHODS

This study employed a qualitative research approach using a case study design to obtain an in-depth understanding of digital well-being, academic resilience, and self-regulated learning among university students. The case study design was selected because the research focused on exploring psychological phenomena within students' real academic contexts, particularly how they experience, interpret, and manage digital technology use during learning activities. A qualitative approach enabled the researchers to explore students' experiences, perceptions, self-regulation strategies, and responses to academic pressures comprehensively and contextually. The case study was considered appropriate because the boundaries between the investigated phenomena and students' real-life academic contexts could not be clearly separated. Accordingly, this design allowed the researchers to examine the interconnectedness of digital well-being, learning self-regulation, and students' resilience in responding to academic demands within their natural educational environment.

The study was conducted at STAIAS (Sekolah Tinggi Agama Islam Ahmad Syibawayhie) Situbondo, Indonesia. The institution was purposively selected because its academic environment provides a relevant context for examining students' digital well-being, academic resilience, and self-regulated learning. The institution represents an educational setting in which students increasingly utilize digital devices and platforms for academic communication, accessing learning materials, completing assignments, and participating in learning activities. This context provides an appropriate setting for investigating how students manage digital demands while simultaneously maintaining their academic functioning and resilience. The selection of STAI Situbondo was also based on the suitability of its institutional characteristics with the research objectives and the researchers' accessibility to relevant participants and data sources. Participants were selected purposively based on their active involvement in academic activities and regular use of digital technology for learning purposes. Relevant academic personnel were also considered as supporting informants to provide complementary perspectives

on students' learning behaviors.

Data were collected through in-depth interviews, observations, and documentation. Semi-structured interviews were conducted to explore students' experiences with digital technology, strategies for managing learning time and activities, experiences of academic pressure, and efforts to maintain motivation when encountering academic difficulties. Observations were conducted during relevant academic activities involving digital technology to obtain contextual information about students' learning behaviors and interactions with digital learning environments. Documentation was used as supporting evidence, including relevant academic documents, learning materials, institutional policies, and records of digital learning activities. The three data collection techniques were employed complementarily to obtain rich, contextual, and comprehensive information. Participants were selected purposively, and data collection was conducted iteratively until the information obtained demonstrated sufficient consistency and no substantial new themes emerged. This process enabled the researchers to develop a comprehensive understanding of the phenomena under investigation.

Data analysis followed an interactive process consisting of data condensation, data display, and conclusion drawing and verification. During data condensation, the researchers selected, focused, simplified, and organized interview, observation, and documentary data according to the research objectives and emerging themes. Data were subsequently displayed through thematic categories, matrices, narrative descriptions, and relationships among themes to facilitate interpretation and identification of patterns. Conclusions were then drawn and continuously verified by comparing information across participants and data collection techniques. Data trustworthiness was established through source and technique triangulation, member checking, and peer discussion. Source triangulation involved comparing information obtained from students and relevant academic personnel, whereas technique triangulation involved comparing interview, observation, and documentary evidence. Member checking was conducted by confirming the researchers' interpretations with selected participants. These procedures enhanced the credibility, consistency, and confirmability of the findings.

RESULT AND DISCUSSION

Result

Self-Regulated Learning as a Mechanism for Strengthening Academic Resilience of

Self-regulated learning in this study refers to students' ability to independently plan, monitor, control, and evaluate their learning activities while using digital technology. Operationally, the finding was identified through several indicators, including the ability to establish learning priorities, manage study time, control digital distractions, monitor academic progress, select appropriate learning resources, and adjust learning strategies when encountering academic difficulties. In the context of digital well-being, self-regulated learning was not merely reflected in students' technical ability to operate digital platforms, but in their capacity to maintain purposeful and balanced technology use for academic purposes. The field findings indicate that students who were able to regulate their digital learning activities tended to demonstrate greater persistence when facing difficult assignments, examination pressure, or learning obstacles. Thus, self-regulated learning emerged as an important

behavioral and psychological mechanism connecting students' healthy digital practices with their capacity to maintain academic functioning under challenging circumstances.

An interview with a university student indicated that regulating digital activities was essential for maintaining concentration and completing academic responsibilities. The informant explained, "I usually determine what assignments I have to finish before opening social media. If I do not set a specific study time, I can spend hours using my phone without realizing that my assignments have not been completed." This statement indicates that the student consciously established priorities before engaging with non-academic digital activities. The researcher interpreted this behavior as an expression of self-regulated learning through goal setting, time management, and control of digital distractions. Rather than completely avoiding technology, the student attempted to differentiate between productive and non-productive digital activities. This finding suggests that digital well-being is reflected not simply in the amount of technology used, but in the extent to which students can exercise control over their digital behavior. Such control provides students with greater opportunities to maintain academic focus and respond adaptively when academic demands increase.

A second informant described a similar but more adaptive strategy when experiencing academic difficulties. The informant stated, "When I do not understand the material, I search for explanations through online lectures or articles. If the first explanation does not help, I look for another source and change the way I study. I try not to give up just because the material is difficult." The researcher interpreted this statement as evidence of self-monitoring, strategic learning, and adaptive persistence. The student did not perceive digital technology solely as a source of distraction but also utilized it as a resource for overcoming academic obstacles. The willingness to search for alternative resources and modify learning strategies demonstrates an active regulatory process. At the same time, the statement reflects academic resilience because the student continued learning despite encountering difficulties. This finding indicates that self-regulated learning may facilitate the transformation of digital resources into psychological and academic resources. Consequently, effective digital engagement can support students' persistence and adaptability when confronted with challenging academic situations.

Observational data further supported the interview findings. During academic activities, students were observed using smartphones and laptops to access learning materials, search for additional references, communicate with classmates, and complete assignments. However, differences were apparent in how students controlled their digital activities. Some students maintained attention toward academic tasks, organized digital materials, and returned to learning activities after brief interruptions. Others frequently switched between academic applications and social media or unrelated digital content, resulting in less sustained attention. The researcher interpreted these differences as variations in students' self-regulatory capacity. Students who demonstrated clearer learning goals appeared more capable of controlling digital distractions and maintaining task engagement. Conversely, students with weaker behavioral regulation were more easily diverted from academic activities. The observation therefore strengthens the argument that digital well-being is closely related to the quality of students' interaction with technology. Effective regulation enables technology to function as a learning resource, whereas uncontrolled digital engagement may interfere with concentration and academic persistence.

Overall, the findings demonstrate that self-regulated learning plays an important role in students' ability to maintain academic resilience within digitally mediated learning environments. The data show that students who establish learning priorities, manage their time, control digital distractions, monitor their academic progress, and modify learning strategies are better positioned to continue their academic activities when difficulties occur. Digital technology does not automatically produce positive or negative academic consequences. Its impact depends substantially on students' ability to regulate how, when, and why they use it. Students who exercised greater control over their digital behavior were able to utilize online resources strategically while minimizing distractions. In contrast, students who lacked sufficient regulation were more vulnerable to fragmented attention and reduced task persistence. Therefore, the central finding can be restated as follows: self-regulated learning enables students to convert digital technology from a potential source of distraction into a supportive resource for sustaining academic resilience.

The pattern emerging from the data reveals a sequential relationship between digital well-being, self-regulated learning, and academic resilience. The first pattern concerns digital control, in which students establish boundaries between academic and non-academic technology use. The second pattern involves learning regulation, characterized by goal setting, time management, monitoring, and strategic use of digital resources. The third pattern is adaptive persistence, whereby students modify learning strategies rather than abandoning academic tasks when difficulties arise. These patterns suggest that students' academic resilience develops through a regulatory process rather than occurring independently of their everyday digital behavior. The stronger the students' capacity to regulate digital learning activities, the greater their ability to remain focused, seek alternative solutions, and persist in completing academic responsibilities. The findings consequently indicate that self-regulated learning functions as a connecting mechanism through which healthy digital engagement can contribute to students' capacity to withstand and recover from academic challenges.

Digital Well-Being as a Foundation for Academic Resilience

Digital well-being in this study refers to students' ability to maintain a healthy, balanced, and purposeful relationship with digital technology while participating in academic and everyday activities. Operationally, the construct was identified through students' ability to control the duration of digital use, distinguish academic from non-academic activities, manage digital distractions, maintain psychological comfort during online learning, and use digital technology without allowing it to interfere substantially with academic responsibilities. Field data indicate that students' digital well-being was reflected not in the absence of digital technology use, but in the capacity to use technology intentionally and maintain control over its psychological and academic consequences. Students who demonstrated healthier digital practices tended to report greater concentration, more organized learning routines, and stronger persistence when encountering academic difficulties. The findings therefore position digital well-being as an important contextual condition that enables students to maintain academic functioning despite the increasing intensity of digitally mediated learning.

One student explained that maintaining boundaries between academic and recreational technology use helped reduce feelings of being overwhelmed. The informant stated, "When I study, I try to focus only on academic applications. After

finishing my assignments, I can use social media or watch videos. If I mix everything together, I become tired quickly and cannot concentrate.” The researcher interpreted this statement as evidence of intentional digital boundary management. The student did not reject technology but established temporal and functional boundaries between productive and recreational activities. This behavior demonstrates an awareness of the psychological consequences of uncontrolled digital multitasking. The informant’s strategy also indicates that digital well-being is closely associated with perceived control over technology. By separating academic and recreational digital activities, the student was able to reduce cognitive overload and preserve concentration. This finding suggests that digital well-being may contribute to academic resilience by helping students maintain psychological stability and academic focus when facing demanding learning situations.

Another informant emphasized the importance of managing digital exposure when academic pressure increased. The student stated, “During examination periods, I reduce unnecessary notifications and social media because they make me anxious when I see too many messages. I feel more comfortable when I can focus on what I need to study.” The researcher interpreted this response as evidence that digital well-being involves not only behavioral control but also emotional regulation. The student recognized that excessive digital stimulation could increase anxiety and interfere with academic concentration. By reducing unnecessary notifications and limiting social media exposure, the student created a more psychologically supportive learning environment. This strategy reflects an adaptive response to academic pressure because the student modified the digital environment according to changing academic demands. The finding indicates that digital well-being becomes particularly important during periods of heightened academic stress, when students require greater psychological control to maintain persistence and avoid being overwhelmed by simultaneous digital and academic demands.

Observations of students’ academic activities revealed differences in digital engagement patterns. Students demonstrating stronger digital well-being tended to organize their devices before beginning academic tasks, silence unnecessary notifications, prepare relevant learning applications, and maintain relatively consistent attention toward academic activities. They occasionally used digital technology for non-academic purposes but generally returned to their academic tasks without prolonged interruption. In contrast, some students frequently shifted between learning platforms, messaging applications, social media, and entertainment content during study sessions. These patterns were accompanied by fragmented attention and longer periods of task completion. The researcher interpreted these observations as evidence that digital well-being is reflected in the quality of students’ digital behavior rather than simply the frequency of technology use. Students who exercised greater control over their digital environment appeared better able to maintain academic concentration and manage learning demands. Thus, the observational findings reinforce the interview evidence that purposeful digital engagement provides a supportive foundation for academic resilience.

The findings can be restated as follows: students with stronger digital well-being demonstrate greater awareness of how technology affects their concentration, emotional condition, and academic responsibilities. They establish boundaries, control unnecessary digital stimulation, and use technology according to specific academic

purposes. These practices help students preserve cognitive and emotional resources that are necessary for responding to academic challenges. Digital well-being therefore functions as more than a lifestyle preference; it represents a form of psychological and behavioral capacity that supports adaptive academic functioning. When students perceive themselves as having control over their digital environment, they are less likely to become overwhelmed by digital demands and more capable of maintaining their academic routines. Consequently, the field findings suggest that digital well-being provides an important foundation upon which self-regulated learning and academic resilience can develop.

The pattern emerging from the data shows a consistent relationship between digital awareness, digital control, psychological stability, and academic persistence. First, students recognize the potential benefits and risks of digital technology. Second, they establish behavioral boundaries to control unnecessary digital exposure. Third, this control reduces distraction and psychological overload, allowing students to preserve attention and emotional stability. Finally, these conditions support continued engagement with academic tasks despite difficulties. The pattern can therefore be described as digital awareness → digital control → psychological balance → sustained academic engagement → academic resilience. Importantly, this pattern complements the previous finding concerning self-regulated learning. Digital well-being creates a supportive digital environment, while self-regulated learning provides the behavioral mechanism through which students transform that environment into effective academic behavior. Academic resilience consequently emerges from the interaction between healthy digital engagement and students' capacity to regulate their learning processes.

Self-Regulated Learning as a Mediating Mechanism between Digital Well-Being and Academic Resilience

Self-regulated learning emerged as a central mechanism linking students' digital well-being with their academic resilience. In this study, self-regulated learning refers to students' capacity to plan learning activities, establish academic goals, monitor their progress, regulate attention and behavior, evaluate learning outcomes, and modify strategies when difficulties arise. The field findings indicate that students with healthier digital habits were generally better able to organize their learning activities and maintain control over digital distractions. This regulatory capacity subsequently supported their persistence when facing demanding academic tasks. Thus, self-regulated learning was not identified merely as an independent learning skill but as a process through which students transformed the benefits of digital well-being into adaptive academic behavior. The data suggest that students' ability to regulate their interaction with technology created favorable conditions for planning, monitoring, and controlling learning processes, which ultimately strengthened their capacity to remain persistent and recover when encountering academic obstacles.

One student explained how digital control directly influenced the way they organized academic activities: "When I have several assignments, I make a schedule and decide which one should be completed first. I also limit checking messages because if I keep checking my phone, my study time becomes longer." The researcher interpreted this statement as evidence of a regulatory sequence beginning with digital control and continuing toward academic self-management. The student recognized that uncontrolled digital interruptions could interfere with time allocation and therefore

deliberately established behavioral boundaries. This process demonstrates forethought, behavioral control, and self-monitoring, which are essential components of self-regulated learning. More importantly, the student's strategy illustrates how digital well-being can create conditions that facilitate effective learning regulation. By reducing unnecessary interruptions, the student was able to allocate cognitive and temporal resources more effectively to academic tasks. This finding suggests that the influence of digital well-being on academic resilience may operate through students' ability to regulate their learning behavior.

Another informant described how self-regulated learning helped them respond to academic failure without abandoning the learning process. The student stated, "I once received a low grade because I studied using the wrong method. After that, I changed my strategy by making summaries and practicing questions. The next time I understood the material better." The researcher interpreted this statement as evidence of self-evaluation and adaptive strategy modification. Rather than interpreting academic failure as a reason to stop trying, the student evaluated the previous learning approach and identified an alternative strategy. This behavior represents a significant dimension of academic resilience because resilience involves maintaining or restoring adaptive functioning following difficulties. At the same time, the student's ability to identify and modify ineffective strategies demonstrates self-regulated learning. The finding therefore suggests that academic resilience may emerge partly from repeated cycles of self-monitoring, evaluation, and behavioral adjustment. Digital well-being supports this process by enabling students to access diverse learning resources, while self-regulated learning determines whether those resources are used strategically to overcome academic challenges.

Observational findings further demonstrated the mediating function of self-regulated learning. Students who appeared to have greater control over their digital activities were observed organizing learning materials, establishing task priorities, searching for additional resources when encountering difficulties, and reviewing completed assignments before submission. These students also appeared more willing to change their learning strategies when the initial approach was ineffective. In contrast, students who frequently shifted between academic and non-academic digital activities showed greater difficulty maintaining consistent attention and completing tasks according to their planned schedules. The researcher interpreted this pattern as evidence that digital well-being alone does not automatically produce academic resilience. Rather, its benefits become more visible when students possess the capacity to regulate their learning behavior. Digital control provides the environmental and psychological conditions for effective learning, whereas self-regulated learning transforms those conditions into purposeful action. This interpretation positions self-regulated learning as the critical process connecting healthy digital engagement with students' ability to persist under academic pressure.

The findings can be restated by emphasizing that digital well-being provides students with a supportive condition for learning, but self-regulated learning determines how effectively that condition is converted into academic adaptation. Students who experienced greater control over their digital environment were more capable of setting learning goals, organizing academic tasks, monitoring their progress, and modifying strategies when necessary. These behaviors subsequently strengthened their persistence when academic challenges emerged. Therefore, the data do not suggest a

simple direct relationship in which healthier digital technology use automatically produces academic resilience. Instead, the relationship appears to involve an intermediate regulatory process. Students must actively transform digital well-being into disciplined learning behavior before it can contribute meaningfully to resilience. The central finding can consequently be summarized as follows: digital well-being creates the conditions, self-regulated learning activates those conditions, and academic resilience represents the resulting adaptive capacity.

The pattern identified across interviews and observations indicates a sequential mechanism consisting of digital control → learning regulation → adaptive adjustment → academic persistence. Students first manage their digital environment by limiting distractions and establishing appropriate boundaries. They subsequently apply self-regulatory strategies such as planning, monitoring, evaluating, and modifying their learning activities. When academic difficulties occur, these strategies enable students to adjust rather than withdraw. The repeated process of adjustment strengthens their ability to remain engaged and recover from setbacks. This pattern provides qualitative evidence for positioning self-regulated learning as a mediating mechanism between digital well-being and academic resilience. The relationship is therefore dynamic rather than linear: digital well-being supports the conditions necessary for effective self-regulation, self-regulation facilitates adaptive responses to academic challenges, and successful adaptation reinforces resilience. This finding constitutes an important contribution because it explains how digital well-being may influence academic resilience rather than merely establishing that the two phenomena are associated.

Discussion

The findings demonstrate that digital well-being provides an important foundation for students' academic resilience, particularly when students are able to regulate their digital behavior effectively (Bantali & Athar, 2025; Evendi, Farid, Suwito, Khayru, & Putra, 2025). This finding is consistent with recent research showing that digital fatigue can negatively affect academic resilience among university students, indicating that excessive or poorly managed digital engagement may weaken students' ability to cope with academic demands. The present findings extend this perspective by demonstrating that digital well-being is not simply the absence of digital fatigue, but involves purposeful technology use, control over distractions, emotional balance, and appropriate digital boundaries (Alhamami, 2025; Meng, Yan, Abbas, Shankar, & Subramanian, 2025). This interpretation also aligns with research emphasizing the importance of psychological resources in helping students maintain academic functioning under pressure. Theoretically, the finding strengthens the argument that digital well-being should be incorporated into contemporary models of student psychological adaptation. Practically, universities should therefore address digital well-being as part of student-support programs rather than treating technology management merely as an individual responsibility.

The findings further reveal that self-regulated learning plays a central role in transforming healthy digital engagement into adaptive academic behavior. This result is consistent with previous studies demonstrating positive relationships between self-regulated learning and academic resilience among university students (Gilar-Corbi, Perez-Soto, Izquierdo, Castejón, & Pozo-Rico, 2024; Sowmya, Anokha, & Nithya, 2025; Wang, Khasawneh, Sarabani, & Ismail, 2025). Previous research has also indicated that

self-regulated learning can mediate relationships between social support, academic resilience, and academic well-being, suggesting that students' regulatory capacities are fundamental to successful adaptation. The present study extends these findings by placing self-regulated learning within the digital well-being framework. Rather than examining self-regulation exclusively as a learning strategy, the findings demonstrate that it also functions as a mechanism for managing the psychological and behavioral consequences of digital environments. Theoretically, this contributes to a more integrated understanding of student adaptation by connecting digital well-being, learning regulation, and resilience. Practically, lecturers and counselors can strengthen students' resilience by teaching goal setting, time management, attention control, self-monitoring, and adaptive learning strategies (Hilal, Khabbache, & Ait Ali, 2024; Saputri, Rizki, & Nurfaizah, 2025).

Another important finding is that students who demonstrated stronger self-regulation were more capable of modifying their learning strategies when encountering academic difficulties. This finding is consistent with previous evidence indicating that self-regulation behaviors can mediate the relationship between resilience and academic performance and that students' regulatory processes contribute to sustained academic functioning. However, the present findings add a contextual dimension by showing how these processes operate within digitally mediated learning environments. Students did not simply persist by working harder; they evaluated ineffective strategies, searched for alternative resources, controlled distractions, and reorganized their learning activities. This pattern suggests that academic resilience is partly constructed through repeated cycles of self-monitoring and adaptive adjustment (Faizin, Rozi, & Sari, 2023; Tang & Zhu, 2024; Warsah, Morganna, Warsah, & Warsah, 2024). Theoretically, this supports a dynamic conception of resilience as an ongoing process rather than a fixed psychological trait. Practically, educational institutions should develop interventions that allow students to practice adaptive learning regulation in authentic digital contexts, particularly when completing complex assignments, preparing examinations, and responding to academic setbacks.

The study also contributes to the applied psychological literature by proposing a sequential relationship in which digital well-being creates favorable conditions, self-regulated learning activates those conditions, and academic resilience represents an adaptive outcome. This pathway complements earlier research that has frequently examined digital fatigue, self-regulated learning, and academic resilience as separate constructs. The findings therefore provide a more integrated explanation of how students psychologically adapt to increasingly digital academic environments. Theoretically, the study expands existing perspectives on self-regulated learning by demonstrating that regulation occurs not only within learning tasks but also through students' management of the digital environments surrounding those tasks. The practical implication is particularly relevant for higher education because reducing students' technology use alone may be insufficient. Universities should instead promote purposeful digital engagement while simultaneously strengthening students' regulatory skills. Academic advisors, counselors, and lecturers can design interventions combining digital well-being education with self-regulated learning training to improve students' capacity to remain focused, adaptive, and persistent.

Despite these contributions, the findings should be interpreted within the characteristics of the qualitative case study. Because the research was conducted within

a specific institutional context and relied on purposively selected participants, the findings are intended to provide contextual understanding rather than statistical generalization. Nevertheless, the convergence of interview and observational evidence strengthens the credibility of the identified pattern. The principal contribution of the study is its explanation of the psychological process connecting digital well-being with academic resilience through self-regulated learning. This provides a useful foundation for future quantitative research testing the proposed mediation pathway across larger and more diverse student populations. Future studies could employ longitudinal or mixed-method designs to examine whether improvements in digital well-being produce sustained changes in self-regulated learning and academic resilience. Experimental research could also evaluate interventions combining digital well-being training with self-regulation strategies. Such research would strengthen causal explanations and determine which intervention components are most effective across different educational and cultural contexts.

CONCLUSION

This study concludes that digital well-being, self-regulated learning, and academic resilience are interconnected psychological processes in university students' digitally mediated academic experiences. The most important finding is that healthy digital engagement does not automatically produce resilience; rather, its positive influence becomes meaningful when students possess the capacity to regulate their learning through goal setting, time management, attention control, self-monitoring, evaluation, and adaptive strategy modification. The central contribution of the study is therefore the identification of self-regulated learning as a mechanism connecting digital well-being with academic resilience, extending existing psychological perspectives beyond technology-use intensity toward purposeful digital functioning and adaptive learning behavior. The study's strength lies in its contextual, in-depth qualitative evidence derived from interviews and observations. However, its single-site case study design, purposive participants, and contextual nature limit transferability and causal inference. Future research should employ longitudinal, mixed-method, or quantitative mediation designs with larger and more diverse samples to test and extend the proposed pathway across different higher-education contexts.

ACKNOWLEDGEMENT

The authors would like to express their sincere gratitude to STAI Situbondo for providing institutional support and granting permission to conduct this research. Appreciation is also extended to all students and academic personnel who generously contributed their time, experiences, and perspectives during the data collection process. Their openness and cooperation were essential to developing a comprehensive understanding of digital well-being, self-regulated learning, and academic resilience. The authors also thank colleagues and academic peers who provided valuable suggestions, constructive feedback, and intellectual support throughout the research process. Finally, sincere appreciation is extended to everyone who contributed directly or indirectly to the completion of this study and the preparation of this manuscript.

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