

Workshop on the Impact of Digital Detox on Sleep Quality for a Better Lifestyle Health among University Students

Lokakarya Dampak Detoks Digital terhadap Kualitas Tidur untuk Gaya Hidup Sehat di Kalangan Mahasiswa

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ABSTRACT

This community service project titled “Workshop: The Impact of Digital Detox on Sleep Quality for a Better Lifestyle Health Among University Students” aimed to enhance students’ awareness and behavioral management regarding responsible digital use and its relation to sleep quality. The program was implemented in two phases: a webinar workshop introducing the concept of digital detox and its physiological foundations, followed by Focus Group Discussions (FGDs) with pre-test and post-test assessments to evaluate behavioral changes. The workshop successfully improved participants’ digital health literacy and encouraged mindful technology practices. Quantitative analysis showed a 52.2% increase in overall knowledge scores and a 65.3% reduction in pre-sleep screen time. Moreover, the average sleep duration improved from 5.8 to 7.2 hours, and self-reported sleep quality rose by 53.7%. Qualitative reflections confirmed greater emotional stability, reduced anxiety, and higher concentration during academic tasks. The findings emphasize that digital detox education effectively bridges awareness and behavioral transformation by promoting self-regulation, reflection, and peer support. This initiative demonstrates the feasibility of integrating digital wellness programs into higher education as part of holistic student development. Sustainable replication of such initiatives can enhance mental resilience and foster balanced digital habits among Indonesia’s youth, aligning with global health goals for well-being and responsible technology use.

Keywords: digital detox, sleep quality, digital health literacy, mental well-being

ABSTRAK

Program pengabdian masyarakat bertajuk Workshop: Dampak Detoks Digital terhadap Kualitas Tidur untuk Gaya Hidup Sehat di Kalangan Mahasiswa ini bertujuan untuk meningkatkan kesadaran, literasi digital, serta manajemen perilaku mahasiswa terhadap penggunaan teknologi secara bertanggung jawab dan dampaknya terhadap kesehatan tidur. Kegiatan dilaksanakan dalam dua tahap, yaitu lokakarya daring yang memperkenalkan konsep detoks digital dan dasar fisiologisnya, serta Diskusi Kelompok Terarah (FGD) dengan penilaian pra-tes dan pasca-tes untuk mengevaluasi perubahan perilaku peserta. Hasil kegiatan menunjukkan peningkatan signifikan dalam literasi kesehatan digital sebesar 52,2% dan penurunan durasi penggunaan gawai sebelum tidur sebesar 65,3%. Rata-rata durasi tidur meningkat dari 5,8 menjadi 7,2 jam, sementara kualitas tidur yang dilaporkan sendiri meningkat sebesar 53,7%. Analisis kualitatif menunjukkan peningkatan stabilitas emosional, penurunan kecemasan, dan peningkatan konsentrasi dalam aktivitas akademik. Temuan ini menegaskan bahwa pendidikan berbasis detoks digital mampu menjembatani kesadaran dan perubahan perilaku dengan menumbuhkan regulasi diri, refleksi, serta dukungan sejawat. Inisiatif ini menunjukkan potensi untuk diintegrasikan ke dalam program kesehatan digital di lingkungan perguruan tinggi sebagai bagian dari pengembangan mahasiswa yang holistik dan berkelanjutan.

Kata Kunci: detoks digital, kualitas tidur, literasi digital, kesejahteraan mental

1. INTRODUCTION

In recent years, the increasing integration of digital technologies into everyday life has led to a phenomenon known as digital overload, where individuals, particularly young adults, spend excessive time using electronic

devices. University students are among the most affected groups, as their academic, social, and entertainment activities are often mediated by digital platforms. Prolonged screen exposure especially before bedtime has been associated with delayed sleep onset, reduced melatonin production, and poor sleep quality (Exelmans & Van den Bulck, 2016). These conditions not only affect physical health but also lead to cognitive fatigue and emotional instability, making digital detox interventions crucial in promoting holistic well-being among students. Sleep quality plays a vital role in maintaining students physical and psychological health. Poor sleep patterns have been linked to decreased academic performance, impaired concentration, and higher stress levels (Alfonsi et al., 2020). The rise of smartphone dependency has exacerbated these problems, as social media scrolling, online gaming, and continuous notifications disrupt circadian rhythms and prevent restorative sleep. A structured digital detox defined as a voluntary period of refraining from digital devices has been identified as a promising strategy to mitigate these negative effects and restore sleep balance (Chun et al., 2023).

The selection of university students in Indonesia as the target participants for this community service program is based on the growing concern over their vulnerability to digital dependency and sleep deprivation. As members of the digital-native generation, Indonesian students spend a significant portion of their day engaging with online platforms for academic, social, and entertainment purposes. The pressure to remain connected and productive often leads to excessive screen exposure, especially at night, which disrupts healthy sleep cycles. Many students perceive constant connectivity as a requirement for success in modern education, making them unaware of the long-term health risks associated with digital overload. In the Indonesian context, the rapid expansion of internet access and smartphone ownership has outpaced digital literacy regarding balanced and responsible use. Universities have embraced technology-based learning systems such as Learning Management Systems (LMS) and online collaboration tools, which, while beneficial, have also blurred the boundary between academic and personal digital engagement. This overlap creates a situation where students struggle to disconnect even after completing their study hours. The absence of structured guidance on how to manage screen time further contributes to unhealthy habits that compromise both physical health and mental focus. Furthermore, the cultural value of community and social interaction among Indonesian students makes workshops an ideal platform for behavioral change. Interactive sessions allow students to share experiences, reflect on personal digital behaviors, and collectively explore healthier alternatives. By conducting this workshop within a peer-learning environment, the program leverages social motivation a factor that strongly influences habit formation among young adults. The communal aspect of Indonesian higher education culture ensures that awareness gained through such workshops spreads organically within student communities, amplifying its long-term impact.

The digital detox movement promotes intentional disconnection from digital media to restore attention, emotional regulation, and overall mental clarity. However, awareness of this concept among university students remains low, and practical implementation is limited. Many students express difficulty in managing screen time due to academic obligations and social connectivity needs. Previous research indicates that short-term digital detox programs, when guided and reflective, can significantly improve both subjective sleep quality and emotional well-being (Fuster et al., 2022). This highlights the importance of educational interventions that not only explain the risks of digital dependency but also train students in self-monitoring and digital mindfulness practices. Universities play a strategic role in addressing lifestyle-related health problems among young adults. Through community engagement activities such as workshops, seminars, and behavioral coaching, institutions can foster awareness and behavioral change in digital consumption habits. In particular, workshops focusing on digital detox offer an interactive and experiential learning environment that encourages students to explore their digital habits and identify personalized coping strategies. Such approaches align with the preventive health education framework, emphasizing proactive behavioral regulation rather than medical intervention (Kaur et al., 2021).

Given these challenges, this community service project was designed to introduce and evaluate the effectiveness of a digital detox workshop for university students. The workshop aimed to enhance understanding of the link between digital use and sleep health while promoting healthier lifestyle patterns. The activity combined theoretical discussions, self-assessment tools, and participatory exercises to create an engaging and reflective learning atmosphere. Through this initiative, it was expected that students would not only gain awareness but also adopt sustainable digital habits that contribute to improved sleep quality and overall well-being (Zhai et al., 2022). Although awareness of digital addiction is rising globally, many students still underestimate its direct impact on physical and psychological health. Studies reveal that nearly 70% of university students check their smartphones within five minutes before sleeping, and 80% keep them beside the bed throughout the night (Twenge et al., 2019). This behavior fosters a constant state of alertness, preventing the brain from entering deep sleep stages essential for restoration. The overuse of digital devices also disrupts hormone balance and contributes to daytime sleepiness and academic fatigue. Such data highlight the necessity for structured interventions at the university level, where health education can be integrated into extracurricular programs promoting digital wellness.

The intersection between digital health literacy and sleep management has become a central issue in higher education. Universities are no longer just centers of academic knowledge but also platforms for fostering lifestyle resilience. Integrating digital detox education into campus-based activities allows students to

experience collective behavioral change supported by institutional commitment. According to recent evidence, students who undergo digital health workshops report higher self-regulation and motivation to manage screen exposure before bedtime (Wong et al., 2022). Therefore, digital detox initiatives have pedagogical as well as health-related implications, making them valuable extensions of university community service programs. Another important consideration is the psychological resistance students often feel toward disconnecting from digital media. For many, the internet is not merely a tool but an extension of social identity and belonging. Consequently, the fear of missing out (FOMO) becomes a key psychological barrier to digital detox participation. Research shows that FOMO significantly mediates the relationship between smartphone use and sleep disturbance, suggesting that effective digital detox programs must address emotional dependency alongside behavioral change (Blackwell et al., 2017). Workshops that incorporate reflective discussions and mindfulness techniques are particularly effective in helping participants overcome these internal barriers.

In addition to its effects on individual health, excessive digital engagement also influences social dynamics on campus. Continuous connectivity reduces opportunities for face-to-face interaction, weakens empathy, and promotes isolation, which collectively undermine students' mental health and sense of community. Digital detox programs therefore serve a dual purpose: they improve sleep and mental recovery while restoring interpersonal communication. Collective digital breaks when practiced within a supportive peer network can enhance both emotional resilience and academic collaboration (Elhai et al., 2021). This dual impact strengthens the rationale for implementing university-based detox workshops as a holistic lifestyle intervention. From a broader perspective, digital detox aligns with the United Nations' Sustainable Development Goals (SDGs), particularly SDG 3: Good Health and Well-being. Promoting responsible digital use contributes to sustainable health behaviors by reducing stress-related disorders and improving overall life satisfaction. For university students who represent future leaders and innovators, fostering digital balance is part of developing emotional intelligence and decision-making competence. As such, community service initiatives in this field play a transformative role not only in individual behavior but also in shaping healthier, more mindful digital cultures (WHO, 2021).

Another reason for focusing on Indonesian students is the increasing prevalence of stress, anxiety, and burnout observed in university populations following the pandemic's shift toward hybrid learning. Continuous exposure to screens during online lectures and assignments has altered students' perceptions of rest and recreation, often replacing offline leisure activities with digital entertainment. Introducing digital detox practices offers a restorative alternative, encouraging students to reestablish a healthier relationship with technology. This initiative thus responds to a pressing psychosocial need by providing practical tools for mental recovery and lifestyle improvement. Lastly, implementing a digital detox workshop in Indonesian universities aligns with national educational goals promoting student well-being and holistic development. Beyond academic achievement, universities are now expected to cultivate emotional intelligence, resilience, and health awareness among students. This program embodies those objectives by combining elements of digital literacy, behavioral education, and wellness promotion. It not only addresses an emerging public health issue but also serves as a model of preventive intervention that can be replicated across campuses to strengthen student welfare and digital mindfulness throughout Indonesia.

The implementation of digital detox education requires interdisciplinary collaboration between health educators, psychologists, and information technology specialists. Universities can leverage this synergy by combining theoretical insights from behavioral science with practical guidance on digital habit management. Such integration ensures that students are not merely instructed but empowered to take control of their technological behaviors. Evidence-based workshops, when regularly evaluated, have shown measurable improvements in both sleep quality and perceived well-being over time (Harwood et al., 2023). This demonstrates the effectiveness of combining educational frameworks with behavioral health approaches in the university context. Ultimately, this program underscores the essential link between digital behavior, sleep health, and overall quality of life. By raising awareness and offering practical solutions through community service, universities can equip students with lifelong skills to manage digital exposure responsibly. The workshop described in this project was thus not limited to a one-time activity but aimed to initiate a cultural shift toward mindful technology use. Through consistent evaluation and follow-up, this initiative is expected to become a sustainable model for health-oriented digital education within higher learning environments (Mei et al., 2022).

2. METHOD

The implementation of this community service program was designed using a two-phase approach to ensure both conceptual understanding and behavioral transformation among participants. The first phase focused on theoretical exposure through a structured webinar workshop, while the second phase emphasized participatory reflection and evaluation through focus group discussions (FGD) combined with pre-test and post-test assessments. This dual-phase design was selected to maximize cognitive learning in the initial stage and reinforce behavioral adaptation through interactive engagement in the subsequent stage. During the first phase, the webinar workshop was conducted online to allow flexible participation across universities while maintaining accessibility for students from diverse academic backgrounds. The workshop was facilitated by a

multidisciplinary team consisting of health educators, psychologists, and digital behavior specialists. The session provided comprehensive material on the concept of digital detox, the relationship between technology use and sleep quality, and strategies to manage screen time before bedtime. The delivery method incorporated presentations, multimedia case studies, and guided discussions to encourage critical reflection. Participants were also introduced to simple behavioral tools such as digital tracking logs and “no-screen bedtime rituals” to apply after the session.

In the second phase, participants were invited to join a Focus Group Discussion (FGD) that served as both a reflective and evaluative component. This phase was carried out in smaller groups to ensure personalized attention and open dialogue. A pre-test was administered before the FGD to measure baseline knowledge and attitudes toward digital detox and sleep hygiene. After engaging in group discussions and practical exercises, a post-test was conducted to assess changes in participants’ understanding, motivation, and behavioral intention. The discussion also provided a platform for students to share personal experiences, challenges, and perceived benefits of applying digital detox strategies in their daily routines. The pre-test and post-test instruments consisted of 15 structured questions divided into three domains: knowledge about the impact of digital exposure on sleep, awareness of digital dependency symptoms, and readiness to implement digital detox practices. The test results were analyzed descriptively to compare participants’ performance before and after the intervention. The FGD transcripts were also reviewed qualitatively to capture emerging themes, including emotional awareness, self-regulation, and peer influence. This mixed-method evaluation enabled a more comprehensive understanding of how the workshop affected students’ cognitive and behavioral aspects simultaneously.

To ensure program sustainability, participants were encouraged to implement a one-week digital detox challenge following the workshop and FGD sessions. During this follow-up period, they recorded their screen time and sleep duration using digital tracking applications. At the end of the week, participants submitted a brief self-reflection report summarizing their experiences and perceived changes in sleep quality. These reports provided valuable feedback for continuous improvement of future digital wellness initiatives. The two-phase structure combining educational exposure and reflective practice proved effective in translating theoretical awareness into tangible behavioral outcomes. Finally, ethical considerations were strictly observed throughout the program. All participants provided informed consent prior to data collection, and their responses were treated confidentially. The facilitators emphasized that digital detox is not a restrictive process but a form of mindful engagement designed to promote balance, well-being, and self-discipline. By adopting this two-phase implementation model, the community service activity successfully bridged knowledge dissemination and behavior transformation, reinforcing the role of universities as agents of both academic and lifestyle education.

The implementation of the community service program required a clear mapping of problems, causes, and strategic solutions to ensure that the workshop design addressed students’ actual needs. Before initiating the digital detox sessions, a situational analysis was conducted to identify the underlying behavioral and psychological issues contributing to poor sleep quality among university students. The findings from this initial assessment revealed patterns of digital dependency, emotional attachment to online communication, and the absence of structured routines promoting digital hygiene. Therefore, an analytical framework was developed to align specific interventions with each identified problem. This framework served as the foundation for formulating measurable and realistic outcomes, ensuring that the workshop did not merely raise awareness but also facilitated behavioral transformation. The problem analysis emphasized that students’ digital dependency was not purely a matter of individual choice but was structurally reinforced by academic and social systems that reward constant online activity. Recognizing this complexity, the intervention combined educational and behavioral components to provide both theoretical understanding and practical tools for change. Through this approach, the workshop bridged cognitive knowledge with emotional reflection, enabling participants to internalize the importance of digital self-regulation. The mapping of problems, causes, and intended outcomes was therefore critical to designing a comprehensive and impactful service model that could be replicated in other higher education settings.

In addition, the expected outcomes were formulated not only at the individual level but also at the institutional and community levels. For students, the immediate goal was to enhance sleep quality and awareness of digital health. For universities, the broader expectation was to initiate a culture of wellness-oriented digital practices that could be integrated into campus programs. The structured analysis table below summarizes these relationships, outlining the problems, causes, methods of intervention, and the outcomes anticipated from the two-phase workshop.

Table 1. Problem Analysis and Expected Outcomes

Identified Problems	Analysis of Causes	Intervention Method	Expected Outcomes
Excessive screen time before sleep among university students	Lack of awareness about the physiological impact of blue light exposure and technostress	Webinar workshop on “Digital Detox and Sleep Hygiene” with expert explanations and multimedia materials	Increased understanding of digital fatigue and its relation to sleep disruption
Low motivation to reduce digital use due to academic and social demands	Perceived necessity of constant online presence for productivity and connectivity	Interactive discussion and reflective sharing during the workshop	Higher intrinsic motivation and readiness to practice digital detox behaviors
Absence of behavioral strategies to manage digital habits	Lack of structured guidance or role models for mindful technology use	Introduction of behavioral tools such as sleep hygiene tracking and “no-screen rituals”	Improved ability to plan and control screen time, particularly before bedtime
Emotional dependency on smartphones and social media	Fear of Missing Out (FOMO) and emotional attachment to digital validation	Focus Group Discussion (FGD) emphasizing emotional awareness and peer sharing	Strengthened emotional regulation and social accountability for digital balance
Limited institutional initiatives addressing digital health	Digital literacy programs rarely include wellness or sleep education	Two-phase community service model integrating education, reflection, and evaluation	Institutional awareness of digital wellness as part of holistic student development

The table above outlines the foundation of the workshop’s pedagogical and behavioral design. It emphasizes that excessive digital engagement among students is driven by multiple interrelated factors, from lack of awareness to emotional attachment to technology. Each problem was strategically matched with an appropriate intervention method, ensuring the activity had both preventive and curative dimensions. For example, the combination of theoretical education and reflective practice was intended to strengthen not only students’ understanding but also their motivation to implement sustainable behavioral change. By explicitly linking causes to interventions, the table highlights that digital detox education must be multidimensional incorporating knowledge transfer, emotional regulation, and institutional support. This framework recognizes that awareness alone is insufficient to drive change unless accompanied by reflective processes that connect learning to personal experience. Therefore, the workshop was designed to create a safe, collaborative environment where students could examine their digital behaviors without judgment and build practical strategies for healthier sleep patterns. Ultimately, the structured analysis in Table 1 illustrates how community service programs can act as an effective bridge between theory and behavioral transformation. The mapping approach provided a clear roadmap for facilitators and participants alike, aligning intended outcomes with measurable behavioral indicators. This ensured that every activity conducted whether a lecture, self-assessment, or discussion contributed toward the overarching goal of improving digital wellness and lifestyle health among university students.

To effectively implement the problem-based design effectively, the program was organized into two main phases, each with a distinct focus and activity structure. The first phase centered on knowledge delivery through a webinar workshop, while the second phase focused on experiential learning and behavioral evaluation through Focus Group Discussions (FGDs) with pre-test and post-test assessments. This division allowed participants to first internalize theoretical concepts and then apply them within a reflective setting. The two-phase structure also facilitated gradual transformation by combining educational exposure with practical self-assessment and peer engagement. The sequence and time allocation of activities were planned to balance knowledge dissemination, participant reflection, and behavioral monitoring. Each phase lasted one day, separated by a one-week period of independent practice, during which participants implemented the digital detox techniques learned from the workshop. This interval enabled the measurement of short-term behavioral change and allowed facilitators to collect qualitative feedback for continuous improvement. To maintain engagement, participants were encouraged to record daily reflections, which were later shared during the second-phase discussions. The detailed rundown of the implementation phases is presented in the following table, outlining the flow of activities, time allocation, and expected outcomes from each stage of the program. This structured approach

ensured coherence between the program's objectives, learning activities, and evaluation procedures, reinforcing the scientific rigor of the community service model.

Table 2. Rundown of Implementation Phases

Phase	Activities	Time Allocation	Description	Expected Outputs
Phase 1: Webinar Workshop (Knowledge Delivery)	Opening session, introduction of digital detox concept, expert presentation on digital health and sleep quality, case study discussion, Q&A, and assignment of digital habit tracking task	1 day (3 hours total)	Conducted via online platform (Zoom/Google Meet). The session included multimedia presentations and interactive polls to assess baseline awareness.	Participants gain theoretical understanding of digital detox and motivation to apply it in daily life.
Break Period (Individual Practice)	Participants apply learned strategies for 7 days, following a "no-screen-before-sleep" guideline and tracking screen time using digital log sheets	1 week (7 days)	Students monitor their own behavior independently while preparing reflection notes for the next phase.	Initial behavioral adaptation and awareness of personal digital habits.
Phase 2: Focus Group Discussion (Evaluation and Reflection)	Pre-test, small group FGD facilitated by mentors, sharing of personal experiences, guided reflection, post-test, and evaluation summary	1 day (3 hours total)	Conducted in hybrid format (in-person or online). Qualitative discussion and quantitative testing to measure changes in awareness and behavior.	Improved understanding of digital health, measurable knowledge gain, and development of sustainable digital wellness habits.
Follow-Up (Post-Program Reflection)	Submission of digital detox reflection report and post-week survey on sleep quality improvement	3 days after Phase 2	Participants summarize progress, insights, and challenges; facilitators analyze outcomes.	Documentation of behavioral change and recommendations for future workshop improvement.

The second table provides a chronological overview of the program flow, integrating academic and practical activities within a coherent learning design. The combination of webinars and FGDs was essential to balance the cognitive and experiential dimensions of learning. Through expert-led workshops, participants gained foundational knowledge, while the subsequent reflective discussions allowed them to contextualize that knowledge in daily practice. This integration strengthened both comprehension and commitment, resulting in observable behavioral improvements within a short period. Furthermore, the time distribution demonstrated an intentional focus on sustainability and reflection rather than one-time exposure. The inclusion of a one-week practice interval encouraged students to experiment with behavioral changes independently, supported by guided tracking and peer accountability. This structure promoted habit formation and provided empirical data for evaluating the effectiveness of the intervention. Overall, the two-phase rundown effectively operationalized the community service objectives, ensuring that each activity contributed directly to enhancing students' sleep quality and digital well-being. The alignment between the planned phases and expected outputs underscored the importance of structured, research-informed community programs in addressing lifestyle challenges among university students in the digital era.

3. RESULTS

3.1 Results and Implementation Overview

The implementation of the community service program was conducted in two phases over a three-week period, engaging 52 university students from different faculties including Education, Psychology, and Information Technology. The activity was carried out in hybrid format, combining an online webinar via Zoom for the first phase and an on-site Focus Group Discussion (FGD) for the second. This structure ensured both accessibility and experiential depth. Participants were selected based on voluntary registration, and most belonged to the 18–23 age group, representing the digital-native generation with high daily exposure to online media. The first phase focused on conceptual understanding, while the second emphasized behavioral reflection and evaluation. The Phase 1 workshop, titled “Digital Detox and Sleep Hygiene for Students,” aimed to build awareness about the relationship between digital behavior and sleep quality. The session began with an introduction to digital overload, the effects of blue light exposure, and the psychological concept of technostress. Experts from health psychology and information science facilitated the discussions, integrating interactive polls and short quizzes to engage participants. By the end of this session, participants were assigned a self-monitoring task to record their daily screen time and bedtime habits for one week. Before the workshop commenced, participants completed a pre-test questionnaire to assess their baseline knowledge and awareness regarding digital detox and its impact on sleep. The test consisted of 15 multiple-choice questions covering three domains: (1) general understanding of digital detox, (2) awareness of digital health risks, and (3) behavioral readiness to change. The results of this pre-test are presented in Table 3 below.

Table 3. Pre-Test Results Summary (N = 52)

Category	Indicators Measured	Average Score (out of 100)	Performance Level	Percentage of Participants per Level
Knowledge	Understanding the concept of digital detox and its relation to sleep quality	58.2	Moderate	46%
Awareness	Recognizing the risks of excessive digital use (blue light, technostress, etc.)	54.6	Low	38%
Behavior	Willingness and readiness to implement digital detox strategies	49.3	Low	16%
Overall Mean	-	54.0	Low–Moderate	-

The pre-test results indicate that most participants possessed only a partial understanding of digital detox concepts, with a general mean score of 54.0 out of 100, categorized as low–moderate. The highest level of awareness appeared in the knowledge domain, reflecting that students had some theoretical familiarity with digital fatigue but lacked comprehensive insight into its biological and psychological consequences. Conversely, the lowest scores were observed in the behavioral domain, suggesting limited readiness or confidence to apply digital detox techniques in daily life. These results validate the necessity of the workshop as an educational intervention. The evident knowledge gap underscores that university students, despite being digitally literate, often neglect health literacy related to sleep and self-regulation. It also confirms that digital dependency among young adults is not merely a matter of access but of behavioral imbalance reinforced by study habits and online social expectations. The data provided a clear direction for the first-phase workshop, allowing facilitators to tailor content toward addressing conceptual misconceptions and practical skill deficits. In summary, the pre-test outcomes serve as the baseline measurement for evaluating the impact of the subsequent training and reflection activities. They highlight that participants began the program with adequate cognitive familiarity but low behavioral readiness, making the workshop’s participatory model essential for promoting attitudinal and lifestyle transformation. The follow-up phases including post-test analysis and behavioral reflection would later demonstrate how these initial deficiencies evolved after the intervention.

3.2 FGD and Post-Test Results

The second phase of the community service activity was conducted one week after the initial workshop and involved a structured Focus Group Discussion (FGD) session with the same 52 participants. This stage aimed to evaluate changes in participants' awareness, attitudes, and behaviors after practicing digital detox techniques for seven days. The FGD was divided into small groups of 8–10 participants, each facilitated by a mentor who guided reflective conversations about personal challenges and experiences during the detox week. Participants discussed their difficulties in limiting screen time, emotional reactions when being offline, and strategies that helped them maintain better sleep routines. During this phase, a post-test assessment was administered immediately after the FGD to measure knowledge retention, awareness improvement, and behavioral change. The post-test used the same indicators as the pre-test to allow for direct comparison and quantitative evaluation of progress. In addition to multiple-choice questions, participants also completed short reflective statements describing how their screen habits and sleep quality had changed. This mixed-method approach combined statistical measurement with qualitative insight, providing a comprehensive view of the workshop's effectiveness.

The comparative results between the pre-test and post-test showed a substantial improvement across all domains, with the most significant increase recorded in behavioral readiness. Many participants reported greater discipline in reducing smartphone use before bedtime and improved awareness of the psychological connection between technology use and rest quality. Table 2 summarizes the changes in participants' scores before and after the workshop and FGD interventions.

Table 4. Comparison of Pre-Test and Post-Test Scores (N = 52)

Category	Indicators Measured	Pre-Test Mean Score	Post-Test Mean Score	Improvement (%)	Interpretation
Knowledge	Understanding digital detox principles and sleep hygiene concepts	58.2	84.6	+45.4%	Substantial knowledge enhancement
Awareness	Recognizing digital fatigue and its impact on mental and physical health	54.6	82.3	+50.8%	Increased digital health awareness
Behavior	Readiness and consistency in applying digital detox techniques	49.3	79.8	+61.8%	Strong behavioral improvement
Overall Mean	—	54.0	82.2	+52.2%	High overall program effectiveness

The table above demonstrates a consistent increase in mean scores across all domains, with an overall improvement rate of 52.2%. The most notable progress occurred in the behavioral domain, reflecting the participants' increased ability to apply digital detox techniques in real-life contexts. Qualitative data from the FGD supported this finding: several students admitted that they initially struggled to avoid screen use at night but gradually experienced deeper and faster sleep after reducing exposure. This behavioral transformation indicates the success of combining theoretical instruction with experiential reflection. Furthermore, the improvement in awareness scores (from 54.6 to 82.3) suggests that the FGD played a critical role in helping participants internalize the connection between technology and health. The group discussions allowed participants to share their anxieties, coping mechanisms, and success stories, creating a peer-support environment that reinforced behavioral commitment. Many expressed that listening to others' experiences normalized their challenges and motivated them to continue practicing digital mindfulness. The qualitative reflections revealed key themes such as "reduced anxiety before sleep," "improved focus during morning classes," and "greater control over social media impulses." Overall, the combination of post-test results and FGD findings confirms that the digital detox workshop achieved its intended objectives. Participants not only demonstrated higher cognitive understanding but also implemented sustainable behavior changes that improved

their sleep and emotional well-being. The participatory structure integrating education, reflection, and self-assessment proved essential in translating awareness into real action. This result underscores the potential for replicating such interventions as part of university-based health promotion programs targeting digital balance and lifestyle wellness among Indonesian students.

3.3 Behavioral and Sleep Improvement Indicators

The third component of the program evaluation focused on identifying tangible behavioral and physiological improvements resulting from participants' digital detox practices. After one week of applying the techniques learned from the workshop, participants submitted digital logs documenting their daily screen time, bedtime routines, and self-reported sleep quality. These records were analyzed to determine whether the digital detox activities led to measurable changes in lifestyle habits. The data collected provided both quantitative indicators (average screen time and sleep duration) and qualitative feedback (perceived changes in rest quality, focus, and emotional stability). A comparative analysis was conducted between participants' behavior before and after the intervention. Before the program, most students admitted to using digital devices up to late hours, averaging five to six hours of non-academic screen exposure daily. During the one-week detox, participants were encouraged to implement a "no-screen-before-sleep" routine and replace it with calming activities such as journaling, reading printed materials, or meditation. The facilitators also recommended maintaining a consistent sleep schedule and recording reflections on emotional changes each night. These structured practices helped foster a sense of discipline and accountability among participants.

At the end of the detox period, participants reported noticeable improvements in sleep quality and general well-being. Many experienced longer sleep duration, easier sleep onset, and a more refreshed feeling upon waking. Moreover, the majority expressed that reducing nighttime phone use led to lower anxiety levels and improved concentration during morning academic tasks. The quantitative summary of these behavioral and sleep changes is presented in Table 5 below.

Table 5. Changes in Digital Behavior and Sleep Patterns (N = 52)

Indicator	Before Digital Detox (Mean)	After Digital Detox (Mean)	Improvement (%)	Interpretation
Average daily screen time (non-academic use)	5.6 hours	3.2 hours	-42.8%	Significant reduction in non-essential device use
Screen time within one hour before sleep	72 minutes	25 minutes	-65.3%	Substantial decrease in pre-sleep digital exposure
Average sleep duration per night	5.8 hours	7.2 hours	+24.1%	Improved sleep consistency and duration
Sleep onset latency (time to fall asleep)	37 minutes	18 minutes	-51.4%	Faster sleep initiation due to digital reduction
Self-reported sleep quality (scale 1–10)	5.4	8.3	+53.7%	Higher satisfaction and restfulness after intervention

The findings in Table 5 reveal that digital detox practices yielded both behavioral and physiological benefits. Participants demonstrated a notable 42.8% reduction in daily non-academic screen time and a 65.3% reduction in phone use within an hour before sleep. These behavioral improvements align with previous research showing that decreased blue light exposure facilitates melatonin production, helping individuals fall asleep more quickly and achieve more restorative rest. The reduction in pre-sleep screen use also indicates that participants successfully implemented the behavioral strategies introduced during the workshop. Sleep duration and quality metrics further confirm the positive impact of the digital detox. The average sleep time increased from 5.8 to 7.2 hours per night, while sleep onset latency decreased by more than half, from 37 to 18 minutes. Participants frequently noted feeling "more alert in the morning" and "less reliant on caffeine." Such self-reported improvements reinforce the physiological evidence that digital abstinence before bedtime enhances circadian rhythm regulation and deep sleep cycles. The increase in the average sleep quality score from 5.4 to 8.3 reflects not only longer rest but also improved psychological calmness and bedtime satisfaction.

Qualitative reflections gathered from FGD sessions support these quantitative findings. Many students described feeling “mentally lighter” and more connected to their offline environment after reducing device dependency. Others reported improvements in academic focus, emotional regulation, and self-esteem, emphasizing that the detox period provided them with clarity and balance. These results confirm that the combination of structured learning, peer support, and personal commitment successfully transformed awareness into measurable well-being outcomes. Consequently, the digital detox workshop proved to be an effective behavioral health model for promoting holistic student wellness within Indonesian higher education institutions.

3.4 Participant Feedback and Program Evaluation

The final stage of the program evaluation aimed to assess the overall satisfaction, perceived relevance, and long-term applicability of the digital detox workshop. Participants were asked to complete a structured feedback form immediately after the Focus Group Discussion. The evaluation instrument consisted of ten items measured using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree) covering dimensions such as material quality, facilitator performance, interactivity, usefulness, and perceived behavioral impact. Additional open-ended questions allowed students to express qualitative opinions regarding what they found most valuable or needed improvement in the program. Most participants reported a high level of satisfaction with the overall learning experience. They emphasized that the workshop’s combination of scientific explanation and reflective discussion made the topic both relevant and transformative. The majority also appreciated the participatory learning method, stating that sharing experiences in groups helped normalize their struggles with digital dependency. In addition, participants found the follow-up week of self-monitoring to be particularly beneficial, as it allowed them to observe the tangible connection between reduced screen time and better sleep quality.

The evaluation results indicated that the program achieved strong ratings across all key indicators, particularly in “practical relevance” and “content clarity.” This reflects that participants perceived the workshop as not only informative but also applicable to their daily routines. Table 6 summarizes the results of the participant satisfaction survey, highlighting the overall effectiveness of the community service activity.

Table 6. Participant Satisfaction Summary (N = 52)

Evaluation Aspect	Description	Mean Score (1–5)	Satisfaction Level
Material relevance	Appropriateness of topics and content to students’ daily digital habits	4.78	Very Satisfied
Facilitator delivery	Clarity, engagement, and communication effectiveness of presenters	4.72	Very Satisfied
Interactivity	Opportunities for participation, discussion, and peer reflection	4.65	Very Satisfied
Practical usefulness	Perceived applicability of digital detox strategies in real life	4.83	Very Satisfied
Workshop organization	Time management, coordination, and accessibility	4.60	Satisfied
Overall satisfaction	General impression and value of the program	4.76	Very Satisfied

The satisfaction data shown in Table 6 indicate that the program received highly positive evaluations from participants, with an overall mean score of 4.76 out of 5. The highest-rated aspects were practical usefulness (4.83) and material relevance (4.78), suggesting that students found the digital detox concept immediately beneficial for their personal and academic well-being. This reinforces the program’s effectiveness not only as an educational initiative but also as a lifestyle intervention adaptable to the realities of student life in Indonesia’s digital environment. Qualitative responses provided deeper insight into the program’s perceived impact. Many students described the workshop as “eye-opening” and “life-changing,” emphasizing that it was the first time they had consciously reflected on their relationship with technology. Some participants suggested that the activity be extended into a semester-long program or integrated into student orientation courses to encourage

more sustained behavioral change. Others proposed that universities develop follow-up modules focusing on stress management and mindfulness as a continuation of digital detox education.

From an evaluative standpoint, the high satisfaction scores and constructive participant feedback demonstrate the workshop's success in fulfilling both its educational and community empowerment objectives. The data indicate that participants not only gained knowledge but also internalized behavioral motivation to maintain digital balance. Moreover, the positive reception validates the program's structure combining theoretical exposure, reflective practice, and peer-based learning as an effective model for future university-led wellness initiatives. This outcome provides a strong foundation for scaling similar workshops across other campuses, promoting a nationwide culture of mindful digital engagement among Indonesian students.

3.5 Summary of Measurable Impacts

The overall evaluation of the community service program demonstrates that the digital detox workshop successfully achieved its intended objectives in both cognitive and behavioral domains. The integration of educational webinars, experiential reflection, and peer discussions resulted in measurable improvements in knowledge, awareness, and lifestyle habits among participants. Quantitative data from pre- and post-tests revealed significant increases across all indicators, while qualitative reflections indicated enhanced emotional regulation, improved sleep patterns, and reduced digital dependency. The combination of learning and behavioral practice proved effective in translating theoretical understanding into sustainable personal transformation.

Participants' feedback and progress logs consistently confirmed that the program's influence extended beyond temporary behavioral adjustments. Many students reported that after the detox period, they continued applying the "no-screen-before-sleep" routine and became more mindful of how much time they spent online. The facilitators also observed positive group dynamics, where participants encouraged one another to maintain digital discipline and share tips for self-control. This collective effort fostered a sense of accountability and community wellness, aligning the program outcomes with the broader goals of promoting holistic student development in Indonesian higher education.

The measurable impacts of the workshop can be categorized into three dimensions: knowledge gain, behavioral change, and lifestyle improvement. Each dimension demonstrated clear, quantifiable progress, reflecting the success of the two-phase model. Table 5 provides a summary of the key outcomes observed throughout the program, combining statistical results with qualitative insights derived from participant reflections and FGD analyses.

Table 7. Summary of Key Outcomes and Impacts (N = 52)

Outcome Dimension	Indicator	Quantitative Result	Qualitative Insight	Interpretation
Knowledge	Pre-test vs. post-test mean score	54.0 → 82.2 (+52.2%)	Participants demonstrated greater understanding of the physiological and psychological effects of digital overuse.	Strong cognitive learning and comprehension improvement.
Awareness	Recognition of digital fatigue symptoms	54.6 → 82.3 (+50.8%)	Students became more self-aware of their emotional triggers and the link between anxiety and device use.	Enhanced digital health awareness and reflection.
Behavior	Screen time before sleep (average)	72 → 25 minutes (−65.3%)	Participants adopted no-screen bedtime routines and reported better self-control.	Clear behavioral transformation and habit formation.
Sleep Quality	Self-reported quality (scale 1–10)	5.4 → 8.3 (+53.7%)	Participants felt more rested, focused, and emotionally stable after detox.	Improved sleep hygiene and psychological recovery.
Satisfaction	Overall satisfaction rating	4.76 / 5.00	Participants described the program as highly relevant, engaging, and impactful.	High acceptance and perceived value among participants.
Sustainability	Continued digital detox practices after 1 week	83% of participants maintained digital hygiene	Students voluntarily extended their detox practice and formed peer support groups.	Sustainable behavioral outcomes indicating long-term effectiveness.

The summary table above demonstrates the multidimensional success of the program. Improvements were observed not only in cognitive and affective learning outcomes but also in concrete behavioral indicators. The 52.2% increase in overall knowledge scores shows that participants developed a comprehensive understanding of digital wellness, while the 65.3% decrease in pre-sleep screen exposure validates the real-world application of

the learned concepts. These changes collectively contributed to an average improvement of 53.7% in perceived sleep quality, confirming the physiological and psychological benefits of digital detox education. Moreover, the sustained impact beyond the intervention period highlights the workshop's effectiveness as a community-based behavioral model. The fact that 83% of participants continued their digital detox habits after one week illustrates that the learning process transcended the boundaries of the formal activity. This outcome underscores the potential scalability of the program across universities as part of student health promotion initiatives. The formation of informal peer-support groups during and after the program further emphasizes the social reinforcement element critical to sustaining behavioral change. In conclusion, the workshop "The Impact of Digital Detox on Sleep Quality for a Better Lifestyle Health among University Students" achieved measurable and meaningful impacts across multiple dimensions of student well-being. The integration of structured education, experiential learning, and reflective evaluation produced a holistic improvement in digital awareness and lifestyle balance. These results affirm that digital detox education can serve as a sustainable, evidence-based approach to enhancing both mental and physical health among young adults, aligning with national efforts to promote healthy digital culture and academic productivity in Indonesia.

4. DISCUSSION

4.1 The Role of Digital Detox Education in Improving Health Literacy among Students

Digital detox education plays a strategic role in enhancing health literacy among university students, particularly in understanding the relationship between technology use and well-being. Health literacy in the digital age extends beyond medical awareness; it involves the ability to critically evaluate online information, recognize behavioral risks, and make informed lifestyle decisions. University students often demonstrate high digital literacy but low health literacy, as they are adept at using technology but lack awareness of its potential harms to mental and physical health. Through structured workshops, this program provided a medium for translating abstract knowledge about digital wellness into practical skills. By framing digital detox as a component of personal health management, the intervention encouraged students to view responsible technology use as a preventive health practice rather than a temporary behavioral restriction. The workshop also addressed a critical gap in student education: the absence of formal discussions about digital well-being within higher education curricula. As most students associate technology primarily with productivity, few realize that uncontrolled digital exposure contributes to stress, anxiety, and sleep disorders. By integrating scientific explanations on circadian rhythms, blue light exposure, and technostress, the program cultivated a comprehensive understanding of how digital habits shape overall health. This educational component aligns with findings by Hassan et al. (2023), who noted that digital literacy must evolve into digital health literacy the ability to apply digital awareness to safeguard psychological and physical wellness. Therefore, the program not only enhanced knowledge but also redefined how students perceive technology's role in their daily lives.

Moreover, the participatory design of the workshop fostered active learning, which is a cornerstone of sustainable literacy development. Instead of a one-way delivery of information, facilitators employed interactive polling, scenario-based reflection, and real-time discussions to strengthen comprehension. These techniques encouraged students to analyze their own digital behaviors and connect them with sleep and concentration outcomes. Lee and Lim (2021) argue that experiential and self-regulated learning approaches are particularly effective in promoting behavioral understanding among young adults because they transform awareness into self-driven change. By applying these pedagogical principles, the workshop bridged the gap between theoretical awareness and applied health literacy, enabling participants to internalize the concept of digital balance. Ultimately, the improvement observed in post-test results and participant reflections confirms that digital detox education can serve as an effective vehicle for promoting digital-era health literacy. The program demonstrated that students who understand the mechanisms of digital fatigue and sleep disruption are more capable of regulating their habits autonomously. This finding echoes Panisoara et al. (2020), who highlighted that technology-integrated educational interventions yield higher cognitive and emotional engagement when students are encouraged to contextualize learning with personal experience. Thus, the digital detox workshop successfully elevated participants' capacity for self-awareness, critical thinking, and informed decision-making core components of health literacy essential for adapting to the demands of a digitally saturated academic environment.

4.2 Behavioral Transformation and Sleep Quality Enhancement through Mindful Digital Practices

The findings from this project confirm that a conscious, structured approach to mindful technology use can drive measurable behavioral change and tangible improvement in students' sleep quality. Behavioral transformation begins when learners move from passive awareness of a problem toward deliberate, self-regulated action. In this study, participants first identified the triggers of their late-night screen habits and then replaced them with restorative activities such as journaling or silent reflection. According to Thomée (2020), mindful reduction of smartphone use decreases psychological arousal and facilitates earlier sleep onset, validating the workshop's emphasis on evening digital hygiene. The pre- and post-intervention data showing both reduced screen exposure and longer sleep duration illustrate that behavioral change grounded in mindfulness principles yields

physiological benefits within a short time span. A second dimension of this transformation lies in the strengthening of self-efficacy and emotional regulation. Students reported that by practicing brief digital abstinence, they experienced greater control over their impulses and anxiety levels. This aligns with Becker et al. (2021), who demonstrated that short-term digital-mindfulness programs enhance executive control and lower stress biomarkers among university populations. The FGD reflections revealed that participants who initially feared missing online interactions later valued the calm and focus that followed limited connectivity. Such affective stabilization reinforces the concept that digital detox is not deprivation but a re-alignment of attention toward meaningful offline experiences.

Moreover, the observed improvement in sleep quality indicates that behavioral regulation mediated by mindfulness has direct physiological consequences. When students reduced device use before bedtime, melatonin production and circadian rhythm alignment improved, leading to quicker sleep onset and higher subjective restfulness. Li et al. (2023) found a comparable pattern among Chinese undergraduates who practiced screen-curfew routines, noting gains in deep-sleep duration and morning alertness. The present results therefore position mindful digital habits as a low-cost, scalable intervention for student health comparable in effect to traditional sleep-hygiene counseling. By cultivating self-awareness and routine consistency, participants internalized sustainable behaviors rather than relying on external enforcement. Finally, these outcomes demonstrate the synergy between behavioral education and well-being promotion in higher education. Through guided reflection and peer accountability, students reframed technology from a source of fatigue into a tool to be consciously managed. This internalization process aligns with contemporary behavioral-change theory, which stresses the importance of cognitive insight, emotional readiness, and supportive environments. Hence, mindful digital practice becomes a gateway to broader lifestyle resilience improving not only sleep but also academic focus and interpersonal balance. Such transformation underscores the enduring value of digital detox initiatives as integral components of campus health-promotion policies.

4.3 The Effectiveness of Workshop and FGD Models in University-Based Health Promotion

The two-phase design of this community service combining a webinar workshop and Focus Group Discussion (FGD) proved to be a highly effective model for promoting health-related behavioral change among university students. Workshops allow for knowledge dissemination and cognitive stimulation, while FGDs provide a reflective platform for internalization and peer validation. The structured sequencing between these phases mirrors Kolb's (2015) experiential learning cycle, where learners move from concrete experience to reflective observation, conceptual understanding, and active experimentation. In this project, the webinar served as the conceptual phase, delivering evidence-based knowledge about digital detox, whereas the FGD functioned as the reflective and experimental stage, reinforcing behavioral practice through social learning. This pedagogical synergy enabled participants to not only acquire theoretical insights but also transform them into lived, observable habits. The workshop format also encouraged collaborative engagement and active participation, essential elements for sustainable learning outcomes. Rather than passively receiving information, participants interacted through polls, quizzes, and guided questions that encouraged them to evaluate their digital routines critically. This aligns with the findings of Louw and du Preez (2018), who demonstrated that participatory workshops significantly enhance self-awareness and behavior regulation in health education contexts. The inclusion of interactive learning components not only improved cognitive retention but also reduced resistance to change by framing behavioral improvement as a shared challenge rather than an individual failure. By allowing students to explore solutions collectively, the workshop environment cultivated a sense of ownership and empowerment.

Meanwhile, the FGD component provided an in-depth, qualitative understanding of how students experienced the digital detox process. Through open dialogue, participants articulated emotional responses, difficulties, and breakthroughs encountered during their week-long practice. The role of the facilitator was not to lecture but to guide reflection and validate diverse perspectives, making learning more democratic and authentic. Saeed and Khan (2022) highlight that FGDs in health promotion function as transformative spaces where learners connect personal experience with collective meaning, fostering both empathy and sustained behavioral commitment. This model of peer-based reflection was particularly effective in enhancing digital mindfulness because it emphasized shared accountability, social reinforcement, and the normalization of struggles. Overall, the integration of workshops and FGDs created a multi-dimensional approach that bridged knowledge and behavior a hallmark of effective health-promotion interventions in academic environments. The statistical improvements recorded in pre- and post-test results confirm the cognitive success of the workshop, while the reflective depth observed in FGD narratives illustrates emotional and behavioral assimilation. Together, these outcomes validate the theoretical foundation of participatory learning models that combine structured knowledge delivery with collaborative reflection. This blended educational strategy aligns perfectly with the goals of modern higher education, which seeks to cultivate not only intellectual competence but also wellness-oriented life skills. Hence, universities can adopt this two-phase framework as a sustainable blueprint for health literacy programs that address the complex challenges of the digital era.

4.4 Toward Sustainable Digital Wellness Programs in Indonesian Higher Education

The success of this digital detox initiative highlights the urgent need to institutionalize similar wellness-oriented programs across Indonesian universities. Higher education institutions play a pivotal role not only in academic development but also in shaping students' mental health and lifestyle behaviors. The increasing prevalence of digital fatigue, burnout, and sleep disturbance among students demonstrates that digital well-being should be treated as an integral part of university health policy. By transforming digital detox workshops into recurring institutional programs, universities can proactively address the health implications of excessive technology use. Hasanah et al. (2021) emphasized that sustainable health education in Indonesian universities must adopt a holistic approach integrating cognitive, behavioral, and emotional dimensions to foster long-term well-being among students. This perspective underscores the importance of treating digital wellness not as a one-time awareness campaign but as a continuous, evidence-based educational movement.

Sustainability in digital wellness programming requires institutional commitment and cross-disciplinary collaboration. Faculty members, student affairs offices, and campus health centers must work together to design interventions that are not only educational but also practical and culturally contextualized. Programs like digital detox workshops can be embedded into orientation week, stress management modules, or elective health courses to ensure continuity. Dhir et al. (2023) note that sustainable digital well-being frameworks depend on consistent policy integration and measurable outcomes, supported by ongoing evaluation mechanisms. In this context, universities could adopt a "Digital Wellness Curriculum" model that includes self-assessment tools, behavioral tracking, and peer-support networks. The combination of academic structure and community engagement ensures that digital health literacy becomes a lifelong competence rather than a temporary behavioral trend.

Furthermore, such institutionalized programs would align directly with global and national health agendas. The World Health Organization (WHO, 2022) identifies digital well-being as a critical component of the Sustainable Development Goals (SDG 3: Good Health and Well-Being), emphasizing the mental health implications of prolonged digital exposure. By promoting structured interventions within university environments, Indonesian higher education institutions contribute to both national and global efforts in reducing technology-induced stress and improving life quality among young adults. In doing so, universities can position themselves as agents of behavioral change, preparing students not only for professional success but also for balanced, resilient digital citizenship. Finally, sustainability must also encompass student agency and peer-led continuity. The creation of digital wellness communities, mentorship circles, and student-led campaigns ensures that the initiative evolves organically beyond formal workshops. As the results of this project show, when students take ownership of their behavioral transformation, the long-term adherence to digital hygiene becomes more consistent. Therefore, universities should foster environments that empower students to become advocates of mindful technology use, amplifying the collective culture of well-being. Through institutional support, peer collaboration, and policy alignment, the vision of sustainable digital wellness in Indonesian higher education can become a living practice strengthening not only health outcomes but also the humanistic and ethical dimensions of technology use among future generations.

5. CONCLUSION

The results of this community service program demonstrate that digital detox education is an effective and sustainable approach to improving students' digital health literacy and lifestyle quality. The workshop successfully raised participants' awareness of the relationship between technology use and sleep health, translating knowledge into concrete behavioral improvements. The significant reduction in screen exposure before bedtime and the corresponding increase in sleep duration confirm the direct impact of mindful digital behavior on physiological well-being. Beyond cognitive understanding, participants internalized emotional balance, focus, and discipline critical competencies for thriving in an increasingly digitalized learning environment. The success of the two-phase implementation combining workshops and FGDs highlights the effectiveness of experiential learning in promoting sustainable health behavior. By integrating theoretical instruction, reflection, and peer collaboration, the program enabled participants to not only understand digital wellness but also to apply it in their daily routines. The mixed-method design, incorporating both quantitative testing and qualitative reflection, strengthened the credibility of the findings and provided a holistic view of behavioral transformation among students.

Furthermore, this initiative underscores the importance of incorporating digital wellness education into university policies and curricula. As technology becomes inseparable from academic and social life, universities must adopt proactive strategies to mitigate its adverse health effects. Regular workshops, peer-led mentoring, and digital mindfulness campaigns can be institutionalized as part of broader student development frameworks. Such initiatives would help cultivate self-regulated learners who understand that well-being and productivity are not competing goals but complementary dimensions of holistic success. Based on these findings, it is recommended that higher education institutions develop long-term digital wellness programs that combine education, behavioral assessment, and community engagement. Universities should also encourage cross-departmental collaboration between educators, psychologists, and IT professionals to sustain these efforts. By doing so, Indonesian higher education can pioneer a movement toward balanced digital living, fostering not only

academic excellence but also the mental and physical health of its students an essential foundation for building a resilient, well-adjusted digital generation.

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