EXPLORING THE METACOGNITIVE DIMENSIONS OF SOCIAL MEDIA CONSUMPTION FOR ELEMENTARY EDUCATION IN ISLAMIC BOARDING SCHOOLS: A STUDY ON SELF-REFLECTION AND SELF-REGULATION

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ABSTRACT

This study explores the metacognitive dimensions of social media consumption among elementary school students in Islamic boarding schools, explicitly focusing on self-reflection and self-regulation. With the increasing integration of social media platforms in educational settings, understanding how elementary school students navigate and make sense of digital media becomes crucial. Metacognition, which involves the awareness and regulation of one's thinking and learning processes, plays a significant role in students' interactions with social media. The study adopts a mixed-methods approach, combining a comprehensive review of existing literature, empirical research, and interviews with students and educators in Islamic boarding elementary schools. The theoretical frameworks of metacognition and social cognitive theory inform the research design and analysis. The study reveals the metacognitive processes associated with social media consumption in Islamic boarding elementary schools. Students self-reflect by critically examining the content they encounter and assessing its relevance to their learning objectives and Islamic values. Additionally, self-regulation strategies, such as setting limits on social media usage and managing online distractions, are employed to maintain focus and ensure responsible digital engagement. The implications of this study highlight the importance of integrating metacognitive skill development within elementary education. Educators and stakeholders can use the findings to design interventions promoting self-reflection and self-regulation in students' social media usage. In conclusion, this study comprehensively explores the metacognitive dimensions of social media consumption in Islamic boarding elementary schools.

Keywords: metacognitive; Islamic boarding elementary schools; social media; self-reflection; self-regulation

INTRODUCTION

The widespread adoption of social media platforms has significantly transformed how individuals engage with information, communicate, and form social connections[1]. Elementary school (MI) students in Islamic boarding environments, known as Pesantren, provide a unique educational setting where students pursue academic knowledge and strive to develop a deep understanding of Islamic principles and values.[2] In recent years,

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[1] M I H Kamaruddin, "Graduate Employability Post-COVID-19: The Case of a Malaysian Public University," *Higher Education, Skills and Work-Based Learning* 11, no. 3 (2020): 710–24, https://doi.org/10.1108/HESWBL-05-2020-0114.

[2] Endin Mujahidin et al., "Importance Performance Analysis Model for Implementation in National Education Standards (SNPs)," *Academic Journal of Interdisciplinary Studies* 10, no. 5 (2021): 114–28, https://doi.org/10.36941/ajis-2021-0127.

integrating social media within these traditional educational environments has raised intriguing questions about its impact on students' metacognitive processes.[3]

Metacognition refers to the awareness and regulation of one's thinking and learning processes.[4] It encompasses self-reflection, self-regulation, and the ability to monitor and control cognitive activities.[5] As elementary students in Islamic boarding schools consume media content through social media platforms, exploring the metacognitive dimensions associated with this consumption becomes essential.[6]

This study explores the metacognitive aspects of social media consumption among elementary students in Islamic boarding schools. Specifically, the focus is investigating the role of self-reflection and self-regulation in their engagement with social media.[7] By understanding how elementary students in Islamic boarding schools navigate and make sense of the digital media landscape, educators and stakeholders can develop strategies to enhance metacognitive skills and promote responsible social media usage.[8]

Social media has become integral to today's digital society, significantly influencing various aspects of individuals' lives, including children and adolescents. As technology advances, younger generations are gaining access to social media platforms

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[3] Mieke Boon and Sophie Van Baalen, "Epistemology for Interdisciplinary Research – Shifting Philosophical Paradigms of Science," *European Journal for Philosophy of Science* 9, no. 1 (2019): 1–28, https://doi.org/10.1007/s13194-018-0242-4.

[4] L De Backer, "Variations in Socially Shared Metacognitive Regulation and Their Relation with University Students' Performance," *Metacognition and Learning* 15, no. 2 (2020): 233–59, https://doi.org/10.1007/s11409-020-09229-5; Daisuke Hamada, Masataka Nakayama, and Jun Saiki, "Wisdom of Crowds and Collective Decision-Making in a Survival Situation with Complex Information Integration," *Cognitive Research: Principles and Implications* 5, no. 1 (2020), https://doi.org/10.1186/s41235-020-00248-z.

[5] Prayogi Dwina Angga and Umar Umar, "Knowledge Analysis of PGSD FKIP University of Mataram Students on Physical Education, Sports, and Health Concept," *Journal on Education* (Universitas Pahlawan Tuanku Tambusai, 2023), https://doi.org/10.31004/joe.v5i2.1060.

[6] D W L Ng et al., "The Role of Metacognition and Its Indirect Effect through Cognitive Attentional Syndrome on Fear of Cancer Recurrence Trajectories: A Longitudinal Study," *Psycho-Oncology* 29, no. 2 (2020): 271–79, https://doi.org/10.1002/pon.5234.

[7] Y Kivity and J D Huppert, "Emotion Regulation in Social Anxiety: A Systematic Investigation and Meta-Analysis Using Self-Report, Subjective, and Event-Related Potentials Measures," *Cognition and Emotion* 33, no. 2 (2019): 213–30, https://doi.org/10.1080/02699931.2018.1446414.

[8] R Suciati, "Millennial Students' Perception on the Integration of Islam and Science in Islamic Universities," *Indonesian Journal of Islam and Muslim Societies* 12, no. 1 (2022): 31–57, https://doi.org/10.18326/ijims.v12i1.31-57.

at increasingly earlier ages.[9] This trend raises concerns about the potential impact of social media on their well-being, cognitive development, and social interactions.[10]

In light of these concerns, this research study focuses on a specific group of elementary students, namely 6th-grade students in Islamic boarding schools, who fall within the age range of approximately 12 years. By narrowing the research scope to this particular group, the study aims to delve deeper into the effects of social media usage on children who have already started engaging with these platforms. Understanding the impact of social media on children's lives is crucial for several reasons. Firstly, this age range represents a critical developmental phase when children are more susceptible to external influences and are in the process of shaping their identities and social interactions.[11] Secondly, elementary schools in Islamic boarding provide a unique context, combining religious education with academic studies, making it essential to investigate the intersection of social media and Islamic values within this setting.

The urgency of conducting research on the metacognitive dimensions of social media consumption for elementary education in Islamic boarding schools lies in need to address the potential impact of social media on students' well-being and academic development. With the increasing prevalence of social media use among elementary school students, it is crucial to understand how they navigate and interact with these platforms. By focusing on metacognition, specifically self-reflection and self-regulation, this study aims to uncover valuable insights into students' awareness, decision-making processes, and strategies for responsible social media use. The findings will contribute to the development of effective strategies and interventions that promote responsible digital citizenship, enhance cognitive development, foster digital literacy, and ensure the overall well-being of elementary students within the dynamic digital landscape.

By exploring the specific effects of social media on 6th-grade elementary students in Islamic boarding schools, this research study aims to provide valuable insights into the

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[9] Amirudin Amirudin and Zaenal Mukarom, "Pendidikan Karakter Dalam Kaulinan Budak Baheula: Studi Nilai Pendidikan Karakter Melalui Permainan Anak Tradisional Sorodot Gaplok Dari Jawa Barat," *Al-Bidayah: Jurnal Pendidikan Dasar Islam* (Al-Jamiah Research Centre, 2019), https://doi.org/10.14421/al-bidayah.v10i2.160.

[10] Purniadi Putra, Akbar Yuli Setianto, and Abdul Hafiz, "Etnopedagogic Studies in Character Education in the Millinneal Era: Case Study Min 1 Sambas," *Al-Bidayah: Jurnal Pendidikan Dasar Islam* 12, no. 2 (2020): 237–52.

[11] Husni Mubarok and Dian Mustika Anggraini, "Literation Skill To Improve Higher-Order Thinking Skills In Elementary School Students," *Al-Bidayah: Jurnal Pendidikan Dasar Islam* 12, no. 1 (2020): 31–42.

challenges and opportunities that arise from their early exposure to digital platforms. The findings of this study can contribute to educational strategies, parental guidance, and policy-making initiatives focused on fostering responsible social media use among children within Islamic educational contexts.

To accomplish the objectives of this research, a comprehensive methodology will be employed, combining qualitative and quantitative approaches. The study will involve data collection through surveys, interviews, and observations, allowing for a multifaceted understanding of the impact of social media on the targeted group.

By examining the unique context of 6th-grade elementary students in Islamic boarding schools, this research study strives to contribute to the existing body of knowledge on social media's effects on students. It is hoped that the outcomes of this study will inform educators, parents, and policymakers about the challenges and potential benefits associated with social media usage in this specific demographic. Overall, this research study seeks to provide a nuanced exploration of the impact of social media usage on children within the targeted age group and educational context. Through this investigation, it is anticipated that effective strategies and guidelines can be developed to maximize the benefits and mitigate the potential risks associated with social media for elementary students in Islamic boarding schools.[12]

The exploration of metacognition in social media consumption holds significance for several reasons. Firstly, it sheds light on the cognitive processes involved in students' interactions with social media platforms. Secondly, it provides insights into this digital engagement's potential benefits and challenges.[13] Lastly, it contributes to the broader conversation about the intersection of Islamic education, digital media, and cognitive development in Islamic boarding elementary schools.

Through a comprehensive examination of existing literature, empirical research, and interviews with students and educators in Islamic boarding elementary schools, this

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[12] Azam Syukur Rahmatullah and Syamsul Ghufron, "The Effectiveness Of'facebook'as Indonesian Language Learning Media For Elementary School Student: Distance Learning Solutions In The Era Of The Covid-19 Pandemic," *Multicultural Education* 7, no. 04 (2021): 27–37.

[13] Nerissa Naidoo, Aya Akhras, and Yajnavalka Banerjee, "Confronting the Challenges of Anatomy Education in a Competency-Based Medical Curriculum during Normal and Unprecedented Times (COVID-19 Pandemic): Pedagogical Framework Development and Implementation," *JMIR Medical Education* 6, no. 2 (2020): 1–15, https://doi.org/10.2196/21701; Jenna L Clark, Sara B Algoe, and Melanie C Green, "Social Network Sites and Well-Being: The Role of Social Connection," *Current Directions in Psychological Science* 27, no. 1 (2018): 32–37, https://doi.org/10.1177/0963721417730833.

study aims to provide a nuanced understanding of the metacognitive dimensions of social media consumption. Addressing the research gaps in this area will offer valuable insights to educators, researchers, and policymakers seeking to facilitate meaningful and mindful engagement with social media in the context of elementary Islamic education.[14]

In the subsequent sections, the study will discuss relevant theoretical frameworks, present the research methodology, analyze the findings, and conclude with implications for practice and directions for future research. The goal is to contribute to the ongoing discourse on the intersection of metacognition, social media, and Islamic education, ultimately fostering a holistic and thoughtful approach to digital media consumption within elementary Islamic boarding schools.

RESEARCH METHODS

The study is conducted in Central Java and focuses on three elementary Islamic boarding schools: Darussalam Dukuh Waluh Purwokerto Islamic Boarding School, al-Hidayah Purwokerto Islamic Boarding School, Al-Ittihaad Pasir Kidul Purwokerto Barat, Banyumas. The study is conducted in Central Java, specifically focusing on three elementary Islamic boarding schools (MI): Darussalam Dukuh Waluh Purwokerto Islamic Boarding School, al-Hidayah Purwokerto Islamic Boarding School, and Ondok Pesantren Islam Al-Ittihad Islamic Boarding School. The population of this study comprises students enrolled in these three elementary Islamic boarding schools in Central Java. The study employs a purposive sampling technique, where the researchers purposefully select participants who meet specific criteria. In this case, the participants are elementary school students within the selected Islamic boarding schools. The sampling is conducted by selecting students from each school who meet the criteria for inclusion in the study. The specific details of the sample size and selection process are not provided in the given text. However, it can be inferred that the researchers would select a representative sample of students from each school to participate in the research study.

The research aims to investigate the use of digital media for the scientific development of elementary students in these Islamic boarding schools. The research

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[14] Muhammad Suyudi et al., "The Effect of Instructional Leadership and Creative Teaching on Student Actualization: Student Satisfaction as a Mediator Variable," *International Journal of Instruction* 15, no. 1 (2022): 113–34, https://doi.org/10.29333/iji.2022.1517a.

subjects include elementary students, caregivers, administrators, and other relevant individuals using digital media for educational purposes. The study employs several methods to collect data, including observation, interviews, and documentation.[15]

In the research described, a mixed-method approach is used, which involves both qualitative and quantitative methods. The qualitative methods include observation, interviews, and documentation, while the quantitative methods are not explicitly mentioned in the text.

Observation allows for the collection of qualitative data through direct observation and recording of activities related to the use of digital media in the selected elementary Islamic boarding schools. The observations provide descriptive insights into students' behaviors, interactions, and digital environments.

Interviews are another qualitative method employed in the research, providing an opportunity to gather in-depth insights and perspectives from students, caregivers, administrators, and other stakeholders. The interviews generate qualitative data through open-ended questions, allowing participants to share their experiences, perceptions, and attitudes regarding digital media usage.

As mentioned earlier, documentation involves collecting and analyzing relevant documents and materials related to the research topic. These documents can provide additional qualitative data that complements the observations and interviews. They serve as supplementary sources of information, such as organizational structures, activity schedules, and program documentation.

While the specific quantitative methods and formulas are not mentioned in the given text, the research may involve the analysis of quantitative data obtained through surveys from google Forms. These data may provide numerical information about students digital media consumption patterns, levels of digital literacy, or other related factors. Statistical analysis and formulas appropriate for the research objectives would be used to analyze the quantitative data.

The research employs a mixed-method approach, utilizing qualitative methods such as observation, interviews, and documentation,- and potentially incorporating

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[15] Ezekiel Akotuko Ayimbila and Diana Akantagriwon, "Effect Of Concept Mapping Instructional Strategy Accompanied By Discussion Web On Students' Academic Achievement In The Concept Of Genetics," *Journal of Education and Practice* (CARI Journals Limited, 2021), https://doi.org/10.47941/jep.668.

quantitative methods to analyze numerical presentation data. Combining these methods allows for a comprehensive and multi-faceted exploration of the research topic. For data analysis, the research employs the theoretical framework developed by Miles and Huberman. Their approach to qualitative data analysis involves a systematic and structured process of organizing, categorizing, and interpreting the collected data to derive meaningful insights and conclusions.[16]

Overall, this research investigates the utilization of digital media for the scientific development of elementary students in Islamic boarding schools of Central Java using qualitative methods such as observation, interviews, and documentation. The data analysis follows the framework proposed by Miles and Huberman.[17]

RESULT AND DISCUSSION

Integrating Metacognition Into The Curriculum of Elementary Schools in Islamic Boarding

Significant potential for enhancing students learning experiences and promoting their cognitive development. By incorporating metacognitive strategies and activities, elementary schools in islamic boarding can empower students to become more self-regulated learners, capable of reflecting on their thinking processes, monitoring their learning, and making appropriate adjustments to improve their academic performance [18]. Here are some key considerations for integrating metacognition into the curriculum of Islamic boarding elementary schools:

1. Metacognitive Instruction: Explicitly teach students about metacognition and its importance in learning. Provide them with a foundation of knowledge about metacognitive strategies, such as goal-setting, self-assessment, and reflection [19].

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[16] Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif, Dan R&D*, *Alfabeta* (Bandung, 2018).

[17] Rizky Adi Sudrajad and Bambang Hari Wibisono, "Spatial Patterns of Islamic Religious Activities in Krapyak District, Yogyakarta," *Journal of Islamic Architecture* 6, no. 4 (2021): 301–12, https://doi.org/10.18860/jia.v6i4.12575.

[18] Fajry Sub'haan Syah Sinaga and Syahrul Syah Sinaga, "Musical Facts and Sustainability of Trunthung Music in Eco-Cultural Studies," *Harmonia: Journal of Arts Research and Education* 21, no. 2 (2021): 278–89.

[19] Anat Zohar and Galit Ben-Ari, "Teachers' Knowledge and Professional Development for Metacognitive Instruction in the Context of Higher Order Thinking," *Metacognition and Learning* 17, no. 3 (2022): 855–95.

2. Reflective Practices: Incorporate regular opportunities for students to reflect on their learning experiences.[20] This can include guided self-reflection activities, journaling, and group discussions to help students develop a deeper understanding of their strengths, weaknesses, and areas for improvement.

3. Goal Setting: Encourage students to set meaningful and attainable learning goals. Help them break down these goals into manageable steps, monitor their progress, and reflect on their achievements.

4. Monitoring and Evaluation: Teach students to monitor their learning processes by regularly assessing their understanding and progress. This can involve self-assessment techniques, such as quizzes, self-checks, or peer feedback, to help students gauge their comprehension and identify areas that require further attention.

5. Problem-solving and Critical Thinking: Foster metacognitive skills by providing opportunities for students to engage in problem-solving activities and critical thinking exercises.[21] Please encourage them to reflect on their thinking processes, analyze different perspectives, and evaluate the effectiveness of their strategies.

6. Collaboration and Discussion: Promote metacognition through collaborative learning and discussion. Please encourage students to engage in meaningful conversations, share their thoughts, and seek peer feedback. This can enhance their metacognitive awareness and promote deeper understanding of the subject matter.

7. Ongoing Support and Guidance: Provide continuous support and guidance to students as they develop their metacognitive skills. This can include regular check-ins, individualized feedback, and opportunities for one-on-one discussions to address any challenges or misconceptions [22].

By integrating metacognition into elementary schools (MI) curriculum, Islamic boarding schools can empower students to become active and reflective learners. This approach not only enhances their academic performance but also equips them with

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[20] Sue Thompson and Neil Thompson, *The Critically Reflective Practitioner* (Bloomsbury Publishing, 2023).

[21] Ni Made Pujani, "The Effectiveness of the Inquiry Learning Model on Basic Science Learning Materials on Problem Solving and Critical Thinking Skills," *Jurnal Pendidikan Dan Pengajaran* 55, no. 1 (2022): 173–81.

[22] D S M Ridha, Wahyudi Buska, and Yogia Prihartini, "The Development of Character Education Curriculum Model for Islamic Elementary Schools In Muaro Jambi," in *Journal of Physics: Conference Series*, vol. 1471 (IOP Publishing, 2020), 12030.

valuable metacognitive skills that can be applied beyond the classroom, contributing to their personal growth and lifelong learning. Here are the characteristics of three Islamic elementary schools in Purwokerto within the boarding school environment:

Pesantren Al-Hidayah

The long establishment of Pesantren Al-Hidayah since 1986 indicates its stability and longevity in providing Islamic education for elementary students (MI). The large number of alumni scattered throughout Indonesia suggests a widespread impact and successful dissemination of knowledge. The proximity to various universities fosters potential collaborations and academic interactions. However, to assess the effectiveness and quality of education, it would be valuable to have more information about the curriculum, teaching methodologies, and the achievements of its alumni in various fields.

Pesantren Darussalam

Pesantren Darussalam's affiliation with H. Djoko Sudantoko, a former Regent of Banyumas, indicates its connection to local leadership and potentially advantageous support networks. The close proximity to multiple universities provides opportunities for academic partnerships and resources. However, to evaluate its educational quality, it would be important to delve deeper into its curriculum, teaching staff qualifications, extracurricular activities, and the extent of community engagement beyond the immediate vicinity.

Al-Ittihaad Pasir Kidul Purwokerto Barat, Banyumas

Pondok Pesantren Islam Al-Ittihad, under the auspices of the Al-Ittihad Kebarongan Kemranjen Banyumas Foundation, began its pure Pesantren education in the academic year of 2008-2009 and continues to this day. The pesantren is committed to producing generations of du'at (Islamic preachers) who are physically and mentally prepared to face the challenges of da'wah (Islamic propagation) from time to time.

Established in the early months of 1958, by a young KH. Achmad Sa'dullah Majdi, in the village of Pasir Kidul (which was then part of the Karanglewas District), the pesantren was founded in collaboration with several fellow residents from the same village. These individuals were alumni of various Islamic boarding schools (pondok pesantren) and had already settled (muqim) in the village. Some notable figures involved in its establishment were Achmad Moendzir, Achmad Moenir, and local community leaders from Pasir Kidul.

Through its strong emphasis on Islamic education, character development, and community engagement, Al-Ittihad Pesantren strives to produce capable and dedicated individuals who can effectively spread the message of Islam and address the challenges of da'wah in the modern world.

In general, a thorough evaluation of these pesantrens would necessitate a more detailed understanding of their elementary teaching methodologies, curriculum relevance, quality of instructors, student outcomes, extracurricular activities, community involvement, and efforts to promote critical thinking and independent inquiry. Additionally, insights from current and former elementary students, as well as the local community, would provide a more nuanced perspective on the strengths and areas for improvement of each pesantren.

Metacognition and Digital Literacy: The Importance of Self-Reflection and Self-Regulation on Social Media for Elementary Education (MI) in Islamic Boarding Schools

In the rapidly evolving digital landscape, elementary students are increasingly engaging with technology and digital platforms as part of their educational journey [23]. While these technological advancements provide numerous benefits, they also raise concerns about the students' ability to navigate the digital world effectively and responsibly. This is where the concepts of metacognition and digital literacy come into play.

The combination of metacognition and digital literacy is particularly crucial for elementary students [24]. At this stage of their educational development, they are not only building foundational academic skills but also beginning to explore the digital realm. By cultivating metacognitive abilities and digital literacy skills, students can become self-regulated learners who are capable of making informed decisions and responsible choices in the digital space.

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[23] Benjamin Luke Moorhouse and Kevin M Wong, "Blending Asynchronous and Synchronous Digital Technologies and Instructional Approaches to Facilitate Remote Learning," *Journal of Computers in Education* 9, no. 1 (2022): 51–70.

[24] S Arsyad and A S Villia, "Exploring the Effect of Digital Literacy Skill and Learning Style of Students on Their Meta-Cognitive Strategies in Listening," *International Journal of Instruction* 15, no. 1 (2022): 527–46, https://doi.org/10.29333/iji.2022.15130a.

Self-reflection plays a vital role in metacognition and digital literacy [25]. When students engage in self-reflection, they become more aware of their own learning processes, strengths, and areas for improvement. This self-awareness allows them to approach digital tasks with intentionality, identify their learning needs, and develop effective strategies to enhance their digital competencies.

Moreover, self-regulation is essential in the context of metacognition and digital literacy. Self-regulated learners have the ability to manage their own learning experiences, set goals, monitor their progress, and adjust their strategies accordingly. In the digital realm, self-regulation enables students to make responsible decisions about their online behavior, manage their time effectively, and critically evaluate the credibility and reliability of digital resources.

By fostering metacognition and digital literacy in elementary students, educators can empower them to become active participants and critical thinkers in the digital world. These skills go beyond technical proficiency and equip students with the ability to navigate complex digital environments, engage in meaningful online interactions, and protect themselves from potential risks.

The combination of metacognition and digital literacy is of utmost importance for elementary students in today's digital era. By nurturing self-reflection and self-regulation skills, educators can empower students to become responsible digital citizens who are capable of leveraging technology for learning, creativity, and positive engagement. By embracing these concepts, elementary students can develop the necessary skills to navigate the digital world effectively and responsibly, ensuring they thrive in an increasingly digital society.

The analysis of the metacognitive dimensions of social media consumption, specifically focusing on self-reflection and self-regulation, is crucial in understanding the impact of social media on individuals' cognitive processes and behavior.[26] Here is a critical analysis of this topic:

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[25] Lilian Anthonysamy, "Being Learners with Mental Resilience as Outcomes of Metacognitive Strategies in an Academic Context," *Cogent Education* 10, no. 1 (2023): 2219497.

[26] Abdullah Aly and Muhammad Thoyibi, "Violence in Online Media and Its Implication to Islamic Education of Indonesia," *Indonesian Journal of Islam and Muslim Societies* 10, no. 1 (2020): 177–98, https://doi.org/10.18326/ijims.v10i1.177-198.

1) Self-Reflection, social media platforms allow individuals to share personal thoughts, experiences, and opinions.[27] A critical analysis would explore the extent to which individuals engage in self-reflection while using social media and examine the factors that may hinder or facilitate this process.[28]

2) Metacognitive Awareness refers to individuals' understanding and awareness of their own thinking processes.[29] In the context of social media consumption, it involves recognizing the impact of social media on one's emotions, thoughts, and behaviors;

3) Self-Regulation, self-regulation refers to individuals' ability to effectively manage their thoughts, emotions, and behaviors. In social media consumption, self-regulation involves setting boundaries, managing time spent on social media, and avoiding potential negative consequences such as social comparison, online harassment, or addictive behaviors.[30]

4) Cognitive Overload and Information Overload, social media platforms offer a vast amount of information, which can lead to cognitive overload and difficulty in processing and evaluating the data effectively. It would also assess the effectiveness of interventions or educational initiatives aimed at promoting metacognitive skills and responsible social media use.[31]

In conclusion, a critical analysis of the metacognitive dimensions of social media consumption, focusing on self-reflection and self-regulation, provides valuable insights into individuals' cognitive processes, decision-making, and well-being in the digital age. It helps identify challenges and opportunities for promoting responsible social media use

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[27] Rintaro Imafuku, Yukiko Nagatani, and Saeko Yamada, "Complexities of Interprofessional Identity Formation in Dental Hygienists: An Exploratory Case Study," *BMC Medical Education* 22, no. 1 (2022): 1–12, https://doi.org/10.1186/s12909-021-03082-z.

[28] Masdar Hilmy and Khoirun Niam, "Winning the Battle of Authorities: The Muslim Disputes over the Covid-19 Pandemic Plague in Contemporary Indonesia," *Qudus International Journal of Islamic Studies* 8, no. 2 (2021): 293–326, https://doi.org/10.21043/qijis.v8i2.7670.

[29] Juhaina Awawdeh Shahbari et al., "Prospective Teachers' Development of Meta-Cognitive Functions in Solving Mathematical-Based Programming Problems with Scratch," *Symmetry* 12, no. 9 (2020), https://doi.org/10.3390/SYM12091569.

[30] Nunuk Suryanti et al., "Learning Model and the Development of Micro, Small, Medium Entreprises in Indonesia," *Pegem Egitim ve Ogretim Dergisi* 11, no. 4 (2021): 138–47, https://doi.org/10.47750/pegegog.11.04.13.

[31] Yulin Li and Dongmei Dou, "The Influence of Medical Insurance on the Use of Basic Public Health Services for the Floating Population: The Mediating Effect of Social Integration," *International Journal for Equity in Health* 21, no. 1 (2022): 1–7, https://doi.org/10.1186/s12939-022-01623-6.

and developing metacognitive skills to navigate the complexities of online platforms effectively.

The Correlation Between Social Media Consumption, Self-Reflection, and Self-Regulation of Elementary School Students (MI) in the Boarding School Environment

The correlation between social media consumption, self-reflection, and self-regulation is an essential area of study in understanding the effects of social media on individuals' cognitive and behavioral processes.[32] Here is an analysis and explanation of this correlation:

(1) Social Media Consumption and Self-Reflection, social media platforms offer opportunities for self-expression and sharing personal experiences.[33] However, excessive consumption of social media can hinder self-reflection. When individuals spend significant time on social media, they may become absorbed in external stimuli and the validation they receive from others. This can lead to a reduced focus on introspection and self-reflection;

(2) Impact of Social Media Consumption on Self-Regulation, excessive social media consumption can impede self-regulation. The addictive nature of social media, coupled with the constant availability of engaging content, can lead to distractions, reduced focus, and decreased self-control. The instant gratification derived from social media interactions and the allure of likes, comments, and followers may undermine an individual's ability to prioritize tasks, manage time effectively, and make conscious decisions aligned with their goals. This can result in impulsive behavior, decreased productivity, and difficulty maintaining self-discipline.

Overall, a complex relationship exists between social media consumption, self-reflection, and self-regulation. Excessive and mindless social media use can hinder self-reflection and self-regulation, while intentional and mindful use can provide opportunities for personal growth and development. To fully understand this correlation, further

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[32] Ian W Eisenberg et al., "Uncovering the Structure of Self-Regulation through Data-Driven Ontology Discovery," *Nature Communications* 10, no. 1 (2019), https://doi.org/10.1038/s41467-019-10301-1.

[33] Dennis Wang et al., "SnapPI: Understanding Everyday Use of Personal Informatics Data Stickers on Ephemeral Social Media," *Proceedings of the ACM on Human-Computer Interaction* 6, no. CSCW2 (2022): 1–27.

research is needed to explore the mechanisms and moderating factors influencing the relationship between social media consumption, self-reflection, and self-regulation.
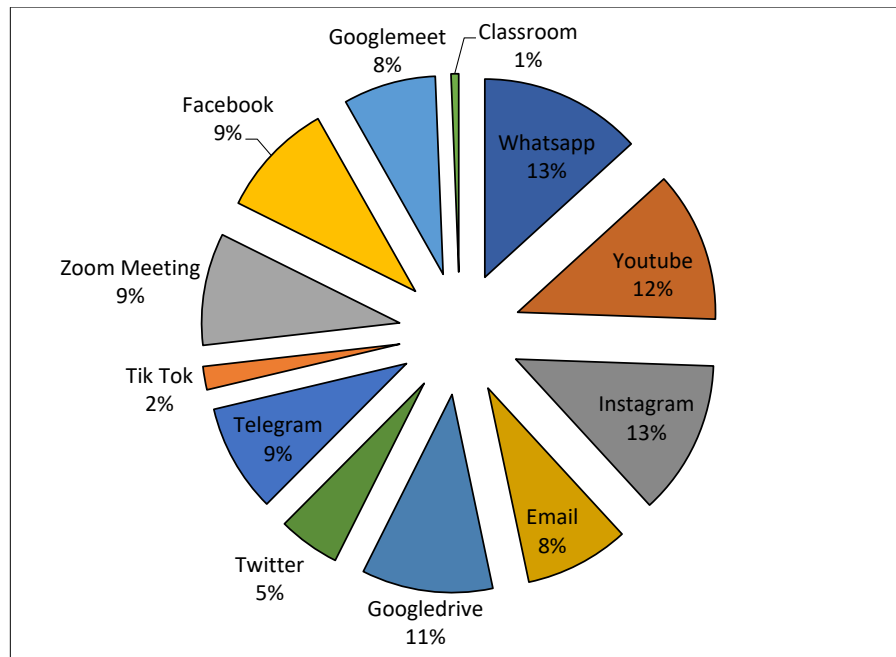

Figure 1.
Percentage of Social Media Consumption Among Elementary School Students (MI) in Islamic Boarding Schools

Based on the provided information, it can be observed that elementary students predominantly utilize digital media platforms, namely WhatsApp, Instagram, and YouTube. These platforms are favored due to their affordability and the perceived benefits they offer. [34] Social media has become a significant source of student engagement, with YouTube usage occurring two to three times a day, with an accumulated duration of two to three hours. Additionally, students tend to post scientifically-oriented status updates on WhatsApp. Although other social media platforms such as Facebook, Twitter, and Line are utilized, their usage frequency is comparatively lower.

CONCLUSION

In conclusion, integrating metacognition into the elementary education (MI) curriculum of Islamic boarding schools offers significant potential for enhancing students'

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[34] Marjorie Valls, "Gender Differences in Social Comparison Processes and Self-Concept Among Students," *Frontiers in Education* (Frontiers Media SA, 2022), https://doi.org/10.3389/feduc.2021.815619.

learning experiences and promoting their cognitive development. By incorporating metacognitive strategies and activities, students can become self-regulated learners, capable of reflecting on their thinking processes, monitoring their learning, and making appropriate adjustments to improve their academic performance. This approach enhances their academic achievements and equips them with valuable metacognitive skills that extend beyond the classroom, contributing to their personal growth and lifelong learning.

Furthermore, the correlation between social media consumption, self-reflection, and self-regulation highlights the complex relationship between these factors. Excessive social media consumption may hinder self-reflection and self-regulation as individuals become absorbed in external stimuli and seek validation from others, diminishing their focus on introspection and self-awareness. However, practicing mindful and intentional use of social media can provide opportunities for personal growth, self-reflection, and self-regulation. Understanding these dynamics is crucial in fostering a balanced approach to technology use and promoting elementary students' well-being in Islamic boarding schools. By integrating metacognition into the curriculum and cultivating responsible social media habits, elementary education in Islamic boarding schools can empower students to become reflective, self-regulated learners equipped with the skills necessary for success in academic pursuits and beyond. In conclusion, based on the findings and discussions, the following recommendations are suggested:

1. Integration of Metacognition: Islamic boarding schools (MI) should consider integrating metacognitive strategies and activities into the elementary education curriculum. This would help students develop self-regulation skills, reflect on their thinking processes, and monitor their learning, leading to improved academic performance and personal growth.

2. Mindful Social Media Use: Promoting responsible and mindful social media habits among elementary students in Islamic boarding schools is crucial. Educators and caregivers should emphasize the importance of intentional use of social media, encouraging self-reflection and self-regulation to prevent excessive consumption and promote a balanced approach to technology use.

3. Balanced Approach to Technology: Islamic boarding schools should establish guidelines and educational programs that promote a balanced approach to technology use. This involves teaching students about the potential risks and benefits of digital media

consumption and guiding them in making informed choices to enhance their overall well-being.

4. Continuous Professional Development: Educators in Islamic boarding schools should receive ongoing professional development in metacognitive instruction and digital literacy. This will equip them with the necessary knowledge and skills to effectively integrate metacognitive strategies and promote responsible technology use among elementary students.

5. Future Research: Further research is recommended to explore the long-term effects of integrating metacognition and promoting responsible social media use in elementary education within Islamic boarding schools. This will contribute to a deeper understanding of the impact on students' academic achievements, cognitive development, and overall well-being.

Implementing these recommendations will create an environment that supports students' metacognitive growth, fosters responsible social media habits, and cultivates their overall development within the Islamic boarding school setting.

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