

## ECOLOGY OF DIGITAL ATTENTION AND STUDENT SELF-REGULATION: A CONCEPTUAL ANALYSIS OF CHARACTER EDUCATION IN THE PLATFORM ERA

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### ABSTRACT

The development of digital platforms has helped to reshape the learning, communication, entertainment, and social relations environment of adolescent students. In this context, digital attention is more proportionate to be understood not only through screen duration or device use settings, but also through media usage habits, social-pedagogical relationships, norms of technology use, and platform design and incentives as part of the student's digital environment. This article aims to compile a conceptual analysis of the relationship between the ecology of digital attention, adolescent self-regulation, and character education in the platform era. Using a conceptual study based on directed narrative literature, this article proposes "the ecology of digital attention" as a conceptual working term and an analytical construct for reading students' attention relationally in a digital environment. Conceptually, digital self-regulation can be understood as a capacity of relational character that includes: 1) goal setting; 2) impulse management; 3) attention management; 4) monitoring of digital habits; 5) reflection on consequences, and 6) digital responsibility. In this position, character education can provide space for reflection on digital use, responsible habituation, attention management, and the development of practical wisdom in students' digital lives. This article is not intended to test empirical relationships, evaluate policies, or assess specific programs.

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## INTRODUCTION

The development of digital platforms has helped to reshape the learning, communication, entertainment, and social relations environment of adolescent students. In a platform society, students' experiences no longer only take place in the physical space of schools and families, but also in digital spaces that have certain governance, interaction logic, and engagement mechanisms. According to , platforms have become an important infrastructure in

contemporary social life. In secondary education, this change makes students' attention needs to be read as a phenomenon that intersects with digital habits, social relations, and technological conditions that accompany daily life. van Dijk (2020)

Discussions about digital media in education are often narrowed to screen *time* or access to gadgets. In fact, the duration of use is not necessarily sufficient to explain how students direct, maintain, divert, or reflect their attention in the digital environment. Studies on self-regulation and digital recreation show that the relationship between digital use and self-regulation needs to be read carefully because screen duration does not necessarily reflect the quality of use, purpose of use, or patterns of student engagement with digital media. Therefore, the issue of digital attention in character education needs to move from the question of "how long do students use gadgets" to the question of how students' attention is formed in interaction with digital media. (Comunello & Mulargia, 2023)

In the literature on *attention economy*, attention is understood as a limited resource in a situation of information abundance. emphasizing that the abundance of information is related to the scarcity of attention. In the era of platforms, this idea is relevant because user engagement has become an important part of the dynamics of digital services. It shows that the attention-based economic model is concerned with the design of digital services that are oriented towards user engagement. However, this article does not position the platform as the sole factor that determines student behavior. Platform design and incentives are more accurately read as part of the conditions of the digital environment that provide opportunities as well as obstacles to attention management. Joseph & Sengul (2025) Sala et al. (2024)

The issue of digital attention is closely related to student self-regulation. Self-regulation in this context includes the ability to set goals, manage impulses, manage time, maintain focus, and reflect on the use of digital media. Placing self-regulation as a process that involves goal setting, self-monitoring, and reflection on actions. In the digital space, these capacities interact with media usage habits, peer norms, family support, pedagogical practices, and platform features. Reinforcing the relevance of this issue by showing that self-regulation mechanisms are related to risky use of digital media in adolescents, although the relationship still needs to be read proportionally and not as a simple causal relationship. Nieborg & Poell (2018) Galea et al. (2024)

Digital self-regulation has direct relevance to character education. Character education is related to knowledge of values, habituation, decision-making, responsibility, and the ability to direct oneself in concrete situations. emphasizing the importance of integration between moral knowledge, moral feelings, and moral actions in character education. The Jubilee Centre (2022) also places character as a virtue formation related to practical wisdom and responsibility in real life. With this position, students' self-regulation in the use of digital media can be read as part of their character capacity, especially when students are faced with choices, habits, and norms of using technology in daily life. Lickona (2012) (Jerome & Kisby, 2019)

This article uses the term "ecology of digital attention" as a conceptual working term, not as a standard theory. This term refers to a relational order that brings together the capacity of individual self-regulation, media use habits, social-pedagogical relations, norms of technology use, and digital platform design and incentives. In this sense, student attention is not understood as an internal individual problem alone, but as a phenomenon that develops in the encounter between the student and his or her digital environment. provides a conceptual basis for reading attention ecologically, while Arthur & Harrison (2023) the Council of Europe (2022) expands the relevance of digital character education through the idea of digital *citizenship* that includes responsibility, participation, and critical understanding in the digital space. (Monday & Elhai, 2023)

Based on this background, this article aims to compile a conceptual analysis of the relationship between the ecology of digital attention, adolescent self-regulation, and character education in the platform era. This article is a conceptual study based on directed narrative literature, not a systematic review, policy study, program evaluation, field research, or anti-technology writing. Policies related to the use of devices in schools can be a comparative context, but not the main focus of the article. The contribution of this article lies in the formulation of an ecological-relational framework that positions digital self-regulation as a character capacity that develops through interaction between

students, the social-pedagogical environment, digital culture, norms of technology use, and platform design and incentives.

## METHOD

This article uses a conceptual study approach based on directed narrative literature. This approach was chosen because the main purpose of the article is not to test hypotheses, calculate effect sizes, or draw empirical generalizations, but to build relationships between relevant concepts to understand adolescent self-regulation in the platform era. This study is directed to formulate a conceptual framework regarding the ecology of digital attention as a working term that connects digital attention, media use habits, self-regulation, and character education (Azhari et al., 2023; F. Li et al., 2023).

The unit of analysis in this article is not respondents, educational units, specific policies, or specific educational programs, but literature and concepts. The focus of the study is directed at several conceptual groups, namely the ecology of digital attention, adolescent self-regulation, character education, attention economy, platform society, platformization, platform design or persuasive *design*, adolescent social media use, and digital citizenship. These concepts were chosen because they are related to the main thesis of the article that students' self-regulation in the use of digital media needs to be understood as a capacity of relational character, not as a mere individual responsibility.

The literature was selected selectively and proportionally based on its conceptual relevance to the focus of the article. The literature for 2020–2026 is prioritized for issues of digital platforms, adolescent social media, platform design, digital attention, digital self-regulation, and digital citizenship. Meanwhile, classical theory is used in a limited way to provide a conceptual foundation for character education, self-regulation, and the economy of attention. The sources used include academic books, journal articles that have gone through peer review, official reports, and documents of international institutions. Journal articles are used primarily to support academic arguments, while official reports and institutional documents are used as contextual or conceptual reinforcements on a limited basis.

Consideration of literature selection and limitations in this study include the relevance of sources to character education, self-regulation, digital attention, adolescent social media, digital platforms, platform design, or digital citizenship; verifiable academic or institutional status; as well as his contribution to the preparation of the conceptual framework of the article. Popular sources or opinions, unverified sources, sources that are too far from the focus of adolescents, sources that only discuss gadget policies that have nothing to do with self-regulation and character education, and sources that encourage excessive causal claims are not used as the main basis for arguments. With these limitations, the study is directed to maintain conceptual precision and avoid unnecessary expansion of discussion.

The analysis was carried out through thematic mapping and conceptual synthesis. The main concepts of the selected literature are mapped out based on their position in the article, such as macro concepts about the economy of attention and platform society, intermediate concepts about platform design and digital habits, and pedagogical concepts about self-regulation and character education. Furthermore, these concepts are compared, limited, and linked to construct an ecological-relational model. The proposed model is conceptual, not an empirical-causal model. The relationship between concepts is not intended as a proof of cause and effect, but rather as an analytical mapping to understand how students' self-regulation can be read in the ecology of digital attention.

This study has several methodological limitations. This article does not use the PRISMA procedure, does not conduct a systematic quality assessment of the study, does not calculate effect sizes, and does not claim to have covered all available literature. This article is also not a field research, policy study, program evaluation, or a study on the effectiveness of gadget bans. Thus, the contribution of the article is limited to the preparation of a proportionate conceptual framework for reading the relationship between the ecology of digital attention, adolescent self-regulation, and character education in the platform era.

## RESULT AND DISCUSSIONS

### Character Education and Student Self-Regulation

Character education is concerned with the recognition of values, habit formation, moral considerations, responsibilities, and actions in real life. Placing character education as an integration between moral knowledge, moral feelings, and moral actions. In this sense, character is not only understood as the ability to know what is good, but also as the willingness and ability to direct oneself to responsible actions. emphasizing that character education is related to the development of virtues and practical wisdom, namely the ability to use appropriate judgment in concrete situations. by Almeida & Júnior (2025) Hrbakova et al. (2025)

In this framework, self-regulation is one of the important capacities in student development. Explains self-regulation as a process that involves goal setting, self-monitoring, action control, and reflection on behavioral outcomes. Self-regulation includes the ability to manage time, manage impulses, maintain attention, assess self-progress, and adjust actions based on goals to be achieved. In adolescent students, this capacity is important because adolescence is characterized by increasing demands for independence, decision-making, and choice management in various life contexts. Howard et al. (2025)

The relationship between self-regulation and character education lies in the dimensions of self-control, responsibility, reflection, and action habits. Self-regulation can help students translate grades into more targeted actions. It is not enough for students to know the importance of responsibility, discipline, or care; He also needs to develop the ability to manage impulses, choose appropriate actions, and reflect on the consequences of the choices made. In this position, self-regulation acts as a bridge between the understanding of values and the practice of character in daily life.

In the digital context, students' self-regulation cannot be narrowed down to time management or device use regulation alone. Adolescents' use of digital media includes diverse goals, habits, forms of engagement, and social contexts. suggests that the relationship between self-regulation and digital activity needs to be read carefully, especially since screen duration is not always enough to explain the quality of students' digital engagement. It also shows that the self-regulation mechanism is related to the use of digital media that is risky in adolescents. Such findings do not need to be read as evidence that digital media directly determines the quality of students' self-regulation, but as a basis for understanding the importance of self-management in an increasingly complex digital context. Vettehen & Schaap (2023) Vajen et al. (2023)

Therefore, digital self-regulation needs to be understood as a relational character capacity. This capacity develops through interactions between students, families, schools, peers, technology use norms, and digital culture that students face on a daily basis. Students' difficulties in managing digital attention cannot be simply understood as personal weakness or low character. This is more appropriately read contextually as part of the process of developing self-regulation in a certain social and digital environment. With this position, character education does not place students as the only party who bears responsibility, but rather as subjects who need to be supported in building self-awareness, reflection, and digital responsibility.

This foundation is important to enter the discussion about the ecology of digital attention in the platform era. If self-regulation is understood as a capacity of relational character, students' attention in the digital space also needs to be read as a phenomenon that does not stand alone. Digital attention is related to media use habits, social norms, pedagogical relationships, and digital environmental conditions that shape the way students direct and maintain their focus. The next section discusses how the ecology of digital attention can be used as a conceptual working term to read the relationship between attention, self-regulation, and character education in the platform era.

### **The Ecology of Digital Attention in the Platform Era**

Attention is a limited resource in an increasingly abundant information environment. Explains that the abundance of information is related to the scarcity of attention, because the more information is available, the greater the demand to select, sort, and direct attention. In the context of education, this idea is relevant to understand that students' attention is related to the ability to focus as well as the conditions of the information environment they face on a daily basis. In the digital era, adolescent students interact with various flows of information, messages, notifications, content, and social relations that can form more complex conditions of attention. L. Li et al. (2025)

In the attention economics literature, attention is understood as an important element in the dynamics of media and digital platforms. It shows that the social media business model relies heavily on user engagement, so attention is an important aspect in the dynamics of user engagement in the digital environment. also reading the economy of attention as an important context in the development of contemporary information society. This reading still needs to be done carefully. This article does not position the platform as a party that directly determines student behavior, but rather as part of a digital environment that has certain designs, incentives, and patterns of interaction that can shape the conditions of media use. Dekker et al. (2025) Chen et al. (2023)

In the era of platforms, attention also needs to be read in a broader socio-technological context. According to , platforms have become an important part of the contemporary social order as various community activities are increasingly mediated by digital infrastructure. Using the concept of platformization to explain how platform logic fits into various social and cultural practices. In the context of adolescent students, learning activities, entertainment, communication, self-expression, and peer relations are increasingly intersecting with the digital space. Therefore, students' attention cannot be reduced to a mere individual problem, but needs to be read in the relationship between individuals, the social environment, and digital technology. Bhargava & Velasquez (2021) Avci et al. (2025)

Based on this context, this article uses the term "ecology of digital attention" as a conceptual working term. This term is not intended as a standard theory or an established empirical variable, but rather as an analytical construct to read the relationship between students' attention, media use habits, social-pedagogical relations, norms of technology use, and digital platform design and incentives. provides a conceptual basis for understanding concern ecologically, that is, as something that is not only in the individual, but also formed through relationships with the social and cultural environment. In this article, the idea is developed in a limited way to read the attention of adolescent students in the context of character education in the platform era. Dekker et al. (2025)

In the context of adolescent students, the ecology of digital attention includes the relationship between students' attention, media use habits, social-pedagogical relationships, norms of technology use, and platform design and incentives. Pupils' attention is related to the ability to direct focus, select information, and maintain engagement on a particular activity. Media consumption habits develop through repetition, purpose of use, and patterns of daily interaction. Social-pedagogical relations include family, school, peers, and norms of technology use. Meanwhile, platform design and incentives can shape conditions of use through personalization, notifications, recommendations, or features related to repeat engagement. These elements do not need to be read as direct cause-and-effect relationships, but as relational arrangements that provide opportunities and obstacles for the management of students' attention.

The ecological framework of digital attention helps explain why students' attention in the platform era is not sufficiently understood through screen duration or device access settings. Digital attention needs to be read relationally because it relates to habits, purposes of use, social norms, pedagogical relations, and the design of the digital environment. This framework serves as a bridge to discuss the next section, namely how platform design, digital habits, and attention patterns of adolescent students interact in daily life. The discussion still needs to be carried out proportionately so as not to simplify the platform as a single cause or place students as the only party responsible for managing their digital attention.

### **Platform Design, Digital Habits, and Teenage Student Attention**

The attention of adolescent students in the digital space is not enough to be read through the duration of the screen alone. The duration of use can indeed be an initial indicator, but it does not explain the purpose of use, the form of involvement, the quality of the activity, and the social context that accompanies the use of digital media. Suggests that the relationship between digital activity and self-regulation needs to be read carefully, especially since screen duration is not always enough to explain students' patterns of digital engagement. Digital attention, as such, deals with the way students choose, move, maintain, and reflect their focus in the digital environment. Howard et al. (2025)

One of the important aspects of the digital environment is the design of the platform and the engagement mechanisms that come with it. Features such as notifications, *autoplay*, *infinite scrolling*, social validation, content recommendations, and feedback mechanisms can form usage conditions related to repeat engagement. It shows that

persuasive design in smartphone use is related to checking habits and distractions, although the context of the study cannot be directly equated with that of school students. also emphasizes the importance of distinguishing the duration of use from problematic usage patterns. Therefore, platform features are more accurately read as part of the conditions of the digital environment, rather than as a single factor that determines student behavior. Vettehen & Sheep (2023) Vajen et al. (2023)

Algorithmic personalization and recommendation systems are also part of the ecology of digital attention. It shows that algorithmic personalization on social media has to do with user engagement, including the frequency and duration of use in the context of a particular platform. These kinds of findings can help read how personalized content streams relate to user engagement patterns and attention choices. However, these claims need to be proportionately limited. Personalization cannot be simply understood as a direct cause of a student's loss of focus, but rather as a mechanism that can shape the conditions of engagement and attention choices in the digital space. Jerome & Kisby (2019)

In daily life, these conditions can intersect with the digital habits of adolescent students. The habit of checking notifications, switching apps, looking for social responses, following content recommendations, or maintaining engagement on certain content can be related to attention patterns that move more easily in certain contexts. shows that the self-regulation mechanism is related to the use of digital media that is risky in adolescents. However, students' difficulties in managing digital attention need not be read as personal weakness or evidence of low character. This pattern is more accurately understood as part of the interaction between habits, use purposes, social norms, and digital environmental conditions faced by students. Hrbackova et al. (2025)

At the same time, teens' social media use cannot be reduced to a risk or distraction. Digital media can also provide space for social relations, self-expression, information searching, informal learning, and identity exploration. emphasizing that adolescents' experiences with social media are diverse and need to be understood by considering the context of use, user characteristics, and design of the digital environment. It also shows the importance of paying attention to the quality of social media use in relation to the development of adolescent identity. In line with that, it shows that adolescents' social media use needs to be read through a balance between risks and opportunities because the digital experience is influenced by user characteristics, types of use, and platform design. Reading social media, therefore, needs to maintain a balance between opportunities and obstacles, without falling into overly general judgments. Galea et al. (2024) Avci et al. (2025) Comunello & Mulargia (2023)

Based on this description, platform design and digital habits can be understood as part of the conditions related to adolescent students' attention. The relationship does not need to be read deterministically. Students' digital attention develops in the encounter between digital environmental design, media usage habits, social relations, purpose of use, and self-regulation capacity. Therefore, the next discussion places digital self-regulation not just as a skill to manage time or limit gadgets, but as a capacity for relational character that develops through social-pedagogical support, habituation, reflection, and norms of technology use.

### **Digital Self-Regulation as a Relational Character Capacity**

Digital self-regulation cannot be reduced to the ability to limit the device or reduce screen duration. Time constraints can indeed be part of self-management, but they are not enough to explain how students set goals, choose digital activities, manage attention, and reflect on the consequences of media use in daily life. suggests that the relationship between digital activity and self-regulation needs to be read carefully, especially since the duration of use does not necessarily reflect the quality of digital engagement. Therefore, digital self-regulation is more appropriately understood as the capacity to manage the use of technology consciously, purposefully, and responsibly in diverse socio-digital contexts. van Dijck (2020)

Within the framework of self-regulation, students need to develop the ability to set media use goals, manage impulses, regulate attention, monitor digital habits, reflect on the consequences of use, and adjust actions. Explains self-regulation as a process that involves goal setting, self-monitoring, action control, and reflection. In the digital context, this process can be seen when students are able to distinguish between the use of media to learn, communicate, recreation, or seek social responses; recognize when attention begins to be distracted; and reassess whether their digital

usage patterns support or hinder the goals they want to achieve. It also shows that the mechanism of self-regulation is related to the use of digital media that is risky in adolescents, so that strengthening self-regulation is relevant to be discussed in digital character education. Sala et al. (2024) Nieborg & Poell (2018)

Digital self-regulation can be understood as a capacity of character because it relates to responsibility, self-discipline, self-awareness, practical wisdom, and ethical decision-making. emphasizes that character education includes the integration of moral knowledge, moral feelings, and moral actions. In the use of digital media, students need to understand that the use of technology is related to goals, values, and responsibilities. Placing practical wisdom as an essential element of character, that is, the ability to consider appropriate actions in concrete situations. Thus, digital self-regulation can be a form of character actualization in students' lives in the platform era. Lickona (2008) Monday & Elhai (2023)

However, digital self-regulation should not be understood as the sole responsibility of students. This capacity develops through interaction between students, families, school pedagogical practices, peers, technology usage norms, digital culture, and platform environmental design. Students' difficulties in managing attention or digital habits do not need to be read as a sign of weak character, but as part of the process of developing self-regulation in a certain socio-technological environment. This position is important so that character education does not turn into a moral assessment of students, parents, teachers, or schools. On the other hand, character education can provide space for dialogue, habituation, reflection, and the preparation of norms for the use of technology that help students develop agency gradually.

Digital self-regulation is also related to the idea of digital citizenship. Placing digital citizenship as the ability to participate responsibly, critically, and ethically in the digital space. Within this framework, self-regulation is not only related to the ability to refrain from excessive use, but also to the ability to understand the purpose of use, maintain social relationships, respect others, manage digital footprints, and make responsible decisions. It also reinforces the importance of looking at the quality of adolescents' social media use, especially since digital spaces can intersect with self-expression and identity development. Therefore, digital self-regulation needs to be placed as part of the formation of broader digital responsibility. Vettehen & Sheep (2023) Avci et al. (2025)

Based on this description, character education has an important role in providing a reflective space for students to understand the goals, limits, consequences, and responsibilities in the use of technology. The educational response does not stop at access settings or time restrictions, although they can be part of the governance of technology use in certain contexts. Within the framework of this article, character education helps students build self-awareness, manage attention, weigh choices, and develop more responsible digital habits. The next section discusses the response of character education to the ecology of digital attention by emphasizing reflection, attention management, and strengthening students' digital responsibility.

#### **Character Education's Response to the Ecology of Digital Attention**

The regulation of the use of gadgets can be understood as one of the institutional responses to the challenge of digital attention in the context of education. In certain situations, managing access to digital devices can help create more targeted learning conditions. However, such settings are not the only framework for understanding the relationship between digital media, self-regulation, and character education. This study did not evaluate the policy of restricting gadgets, did not reject the regulation of the use of technology, and did not assess the practices of certain educational units. In the conceptual framework of this article, the regulation of the use of gadgets is placed as a supporting context that needs to be complemented by strengthening students' digital reflection, habituation, and responsibility.

Character education can provide space for students to reflect on the goals, limits, and consequences of using digital media. Placing character education as an integration between moral knowledge, moral feelings, and moral actions. In the digital context, this integration can be interpreted as the ability of students to understand the relevant value in the use of technology, develop sensitivity to the impact of digital use on themselves and others, and build habits of acting responsibly. Character education, thus, does not stop at the delivery of norms, but provides space for students to weigh their digital choices consciously and reflectively. Lickona (2012)

Attention management has become an important part of the character education response in the platform era. Students are faced with questions about when, for what, how, and with what awareness of what digital media is used, emphasizing the importance of practical wisdom in character education, i.e. the ability to consider appropriate actions in concrete situations. In the ecology of digital attention, practical wisdom can relate to the ability to manage focus, recognize distractions, delay impulsive responses, and build more responsible digital habits. It also reinforces the importance of reading digital self-regulation carefully, not solely through screen duration, but through engagement patterns and self-management mechanisms. Jerome & Kisby (2019) Joseph & Sengul (2025)

Character education responses also need to be understood relationally. Schools can be pedagogical spaces that help students establish norms of technology use, reflect digital experiences, and relate media use to learning and social life goals. Families can be a supportive context for habituation, conversation, and strengthening of digital responsibility outside of school. Peers also act as a social environment that shapes norms, expectations, and media usage habits. This emphasis is not intended to place the school, teachers, parents, or peers as sole responsible parties. Digital self-regulation is more accurately read as a capacity that develops through interaction between students and their social-pedagogical environment.

In a broader framework, digital citizenship can extend character education to the digital space. Placing digital citizenship as the ability to participate responsibly, critically, and ethically in the digital environment. This perspective helps to affirm that character education in the platform era is not only related to self-control, but also to responsibility towards others, awareness of digital footprints, respect for communication norms, and critical understanding of the digital environment. also emphasizing the importance of paying attention to social media design, literacy, and the context of adolescent use in a balanced manner. Thus, digital character education can provide space for students to develop agency, not just compliance with the rules of technology use. Nieborg & Poell (2018) Monday & Elhai (2023)

Based on this description, the response of character education to the ecology of digital attention needs to be read proportionally. Regulating the use of gadgets can be part of the governance of technology use, but the establishment of digital self-regulation requires space for reflection, habituation, attention management, and strengthening digital responsibility. With this position, the article places character education as a framework that helps students understand and manage their attention in a platform environment, without reducing digital issues to prohibitions, screen duration, or individual student responsibilities. This description leads to the conclusion that the ecology of digital attention can be an analytical construct to read the relationship between attention, self-regulation, and relational character education.

## CONCLUSION

This article offers the ecology of digital attention as an analytical construction or conceptual working term to read the relationship between student attention, media use habits, self-regulation, and character education in the platform era. In this framework, students' attention is not sufficiently understood through screen duration or access to gadget settings. Digital attention needs to be read relationally because it is related to the purpose of media use, digital habits, social-pedagogical relations, norms of technology use, and platform design and incentives that shape the conditions of use in the daily lives of adolescent students.

Digital self-regulation in this article is understood as the capacity of relational character. This means that self-regulation includes the ability to set usage goals, manage impulses, maintain attention, monitor digital habits, reflect on the consequences of actions, and adjust behavior responsibly. This capacity develops through interaction between students, families, schools, peers, digital culture, technology usage norms, and the platform environment. Thus, students' difficulties in managing digital attention do not need to be read as a character weakness, but rather as part of the process of self-regulation development in a certain social-digital ecology.

The conceptual implications for character education are the need to expand the educational response from access regulation to reinforcement of reflection and attention management. Character education can provide space for students to understand the purpose of digital use, build responsible habits, weigh the consequences of actions, and

develop practical wisdom in digital situations. Within this framework, digital responsibility is related to self-awareness, respect for others, awareness of the consequences of digital actions, and the ability to make proportionate decisions in the digital space.

This article has limitations as a conceptual study based on directed narrative literature. This article does not examine empirical relationships, does not calculate the influence between concepts, does not evaluate specific policies or programs, and does not claim ecological-relational models as causal models. Therefore, further studies can be directed to empirical research that examines how students, families, schools, and the social-digital environment build digital self-regulation in certain contexts. Further study can also deepen how the practice of reflection, habituation, and attention management is developed proportionately in character education in the platform era.

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