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SELF-CONTROL IN THE DIGITAL AGE: A SYSTEMATIC REVIEW OF PREDICTORS AND INTERVENTIONS FOR ACADEMIC SUCCESS AND DIGITAL BEHAVIOR

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Abstract: This systematic literature review examines the role of self-control in students' academic performance and emotional well-being, particularly in the context of the digital era. Drawing from 19 studies published between 2014 and 2024, the review identifies key predictors of self-control, including personality traits, parenting styles, and motivation, while also exploring its impact on academic success, psychological resilience, and digital engagement. Interventions such as mindfulness-based programs and cognitive-behavioral therapy (CBT) emerged as effective strategies for enhancing self-regulation, with significant improvements in academic engagement and reductions in procrastination and academic burnout. Despite these promising interventions, the review identifies several gaps in the literature, particularly in the lack of longitudinal studies and cross-cultural perspectives. This paper calls for more research on self-control as a dynamic resource that influences both academic and digital behaviors, particularly in post-pandemic educational contexts. Educational policies and intervention programs should prioritize building self-regulation skills to better equip students for the challenges of modern, technology-driven academic environments.
Keywords: Self-control, Digital Era, Academic Performance, Interventions, Systematic Review.

INTRODUCTION

Over the past decade, self-control has emerged as a pivotal psychological construct in understanding students' academic success, emotional well-being, and behavioral adjustment (Álvarez-Maldonado et al., 2024; Aturohma et al., 2025; Duckworth et al., 2019; Rosenbaum & Ronen, 2012). Self-control refers to the capacity to regulate one's thoughts, emotions, and actions in pursuit of long-term goals, even in the presence of immediate

temptations (Amaya, 2020; Tangney et al., 2018; Werner & Ford, 2023). It operates as a foundational self-regulatory mechanism that enables individuals to align behavior with personal standards and values (Inzlicht, Schmeichel, & Macrae, 2014). Students with higher levels of self-control demonstrate better concentration, intrinsic motivation, and coping strategies, which support academic persistence and adaptability (Álvarez-Maldonado et al., 2024; Stephenson et al., 2020; Wahyudin et al., 2022; Yang et al., 2024). Conversely, deficits in self-control have been consistently linked to procrastination, emotion dysregulation, and increased vulnerability to stress and anxiety in educational contexts (Mohammadi Bytamar et al., 2020; R. Zhang et al., 2022).

In the post-pandemic digital era, sustaining attention and managing impulses have become more challenging due to continuous technological engagement. The widespread use of smartphones, social media, and multitasking behaviors contributes to digital distraction, which fragments attention and depletes cognitive resources (Joshi, 2025; Nabung, 2024; Yuniawati et al., 2024). Such constant exposure to digital stimuli not only induces mental fatigue but also weakens self-regulatory capacity, diminishing students' ability to delay gratification and sustain focus on academic goals (Rajan & Harini, 2025; Ramli et al., 2021; Yaochen & Van Der Blom, 2025). Recent studies show that poor self-control predicts maladaptive technology use, lower academic performance, and heightened risk of academic burnout—a psychological condition marked by emotional exhaustion, cynicism, and reduced efficacy (Li & Liu, 2022; Oktasari et al., 2022; Saxena, 2024; Stevani et al., 2025). These findings underscore that self-control serves not merely as an individual trait but as a dynamic protective factor that buffers the detrimental effects of stress, digital overload, and academic pressure (Li et al., 2025; Zhou et al., 2021).

The concept of self-control has been interpreted through several complementary theoretical frameworks. Baumeister et al., (2007) proposed the Strength Model of Self-Control, suggesting that self-regulatory capacity functions like a limited resource that can be depleted through excessive use but replenished with practice. Duckworth et al., (2019) advanced the idea of self-control as a stable personality trait predicting success beyond intelligence or socioeconomic status. Tangney et al., (2018) described self-control as a multifaceted construct encompassing impulse regulation, emotional stability, and goal persistence. More recent perspectives—such as the Dual-System Model (Hofmann et al., 2012) and Self-Determination Theory Ryan & Deci (2000)—highlight the interaction between automatic impulses and deliberate regulation. Integrative approaches now emphasize self-control as a process involving cognitive, emotional, and motivational systems that jointly sustain adaptive functioning (Hennecke & Bürgler, 2023; Werner & Ford, 2023). These frameworks collectively affirm that self-control is not only central to behavioral inhibition but also to resilience, emotion regulation, and goal-directed learning (Duckworth et al., 2019; Lestari et al., 2024; Pramudita et al., 2025; Wahyudin et al., 2025).

Despite the breadth of existing literature, several gaps remain in understanding self-control within contemporary higher education. Although numerous studies have linked self-control to academic outcomes, digital behaviors, and well-being, empirical findings remain fragmented across psychological and educational domains (Farida et al., 2022; Khoirunnisa et al., 2024; Whelan et al., 2022; Wulandari et al., 2020). Cross-cultural perspectives also remain underexplored, particularly in collectivist societies where social harmony and interdependence may shape self-regulatory processes differently (Masaki, 2023). Moreover, while prior reviews have examined self-regulated learning and executive functioning, they rarely integrate findings on self-control as a holistic construct encompassing cognitive, emotional, and behavioral regulation (Duckworth et al., 2019). In the wake of digital transformation and hybrid learning environments, understanding self-control as a psychological resource has become increasingly urgent for addressing academic burnout, emotional strain, and technology overuse among students (Irmayanti et al., 2024; Li & Liu, 2022; Nweke et al., 2024; Stevani et al., 2025; Wahyudin et al., 2022). Therefore, this study aims to conduct a systematic literature review on self-control among students, focusing on its key predictors, psychological and academic outcomes, and intervention approaches. Using the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) methodology, this study synthesizes empirical evidence published between 2014 and 2024 to identify dominant trends, methodological patterns, and intervention efficacy. The findings are expected to contribute to a more integrated theoretical understanding of self-control as both a predictive and protective factor within educational psychology, while providing evidence-based recommendations for educators, counselors, and policymakers to strengthen students' adaptive self-regulation in an era of digital transformation.

METHOD

RESEARCH DESIGN

This study adopted the PRISMA 2020 (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) framework to ensure methodological rigor, transparency, and reproducibility throughout the review process (Page et al., 2021; Veroniki et al., 2025). A comprehensive search strategy was conducted across two major databases, Scopus, covering the publication period from 2014 to 2024.

The Boolean search string applied in Scopus was: ("self-control" OR "self regulation" OR "self-regulatory capacity") AND ("students" OR "adolescents" OR "university students") AND ("academic performance" OR "mental health" OR "well-being" OR "intervention"). Boolean operators ("AND," "OR") were used to combine

and refine the terms, while backward and forward citation tracking was performed to identify additional relevant studies not captured in the initial query (Gusenbauer & Haddaway, 2020; Page et al., 2021). This systematic approach ensured the inclusion of both well-established and emerging research related to self-control within educational contexts.

The inclusion criteria comprised peer-reviewed empirical studies published in English that investigated self-control as either a primary or secondary variable in educational or psychological contexts. Eligible studies focused on secondary and higher education students and included quantitative, qualitative, or mixed-method designs. Articles were excluded if they (a) focused on non-student populations (n = 47), (b) did not consider self-control as the main variable (n = 37), or (c) had conceptual or methodological limitations (n = 10). The screening and eligibility assessments were independently conducted by two reviewers to minimize bias, and any discrepancies were resolved through discussion and consensus (Polanin et al., 2019). This procedure helped ensure consistency and methodological transparency throughout the selection process.

The identification process followed the four standard PRISMA stages: identification, screening, eligibility, and inclusion. During the identification phase, a total of 2,213 records were retrieved from the databases (n = 2,213). After removing 483 duplicates, 1,730 records remained for initial screening. In the screening phase, 1,584 records were excluded after reviewing titles and abstracts that did not meet the inclusion criteria, such as studies focusing on unrelated constructs or non-student samples. A total of 146 full-text articles were then sought for retrieval. After assessment, 113 reports were assessed for eligibility. Of these, 47 reports were excluded due to focusing on non-student populations, 37 reports were excluded because self-control was not the main variable, and 10 reports were excluded due to conceptual or methodological limitations.

Ultimately, 19 studies were included in the final synthesis, comprising a range of study designs including quantitative, qualitative, and experimental studies. Data extraction included key study information such as research design, sample characteristics, measurement instruments, core findings, and types of interventions. The methodological quality of all included studies was appraised using the Joanna Briggs Institute (JBI) Critical Appraisal Checklist, ensuring that only studies with acceptable methodological rigor were synthesized (Santos et al., 2018; Tricco et al., 2022). Figure 1 presents the PRISMA 2020 flow diagram summarizing the identification, screening, eligibility, and inclusion stages.

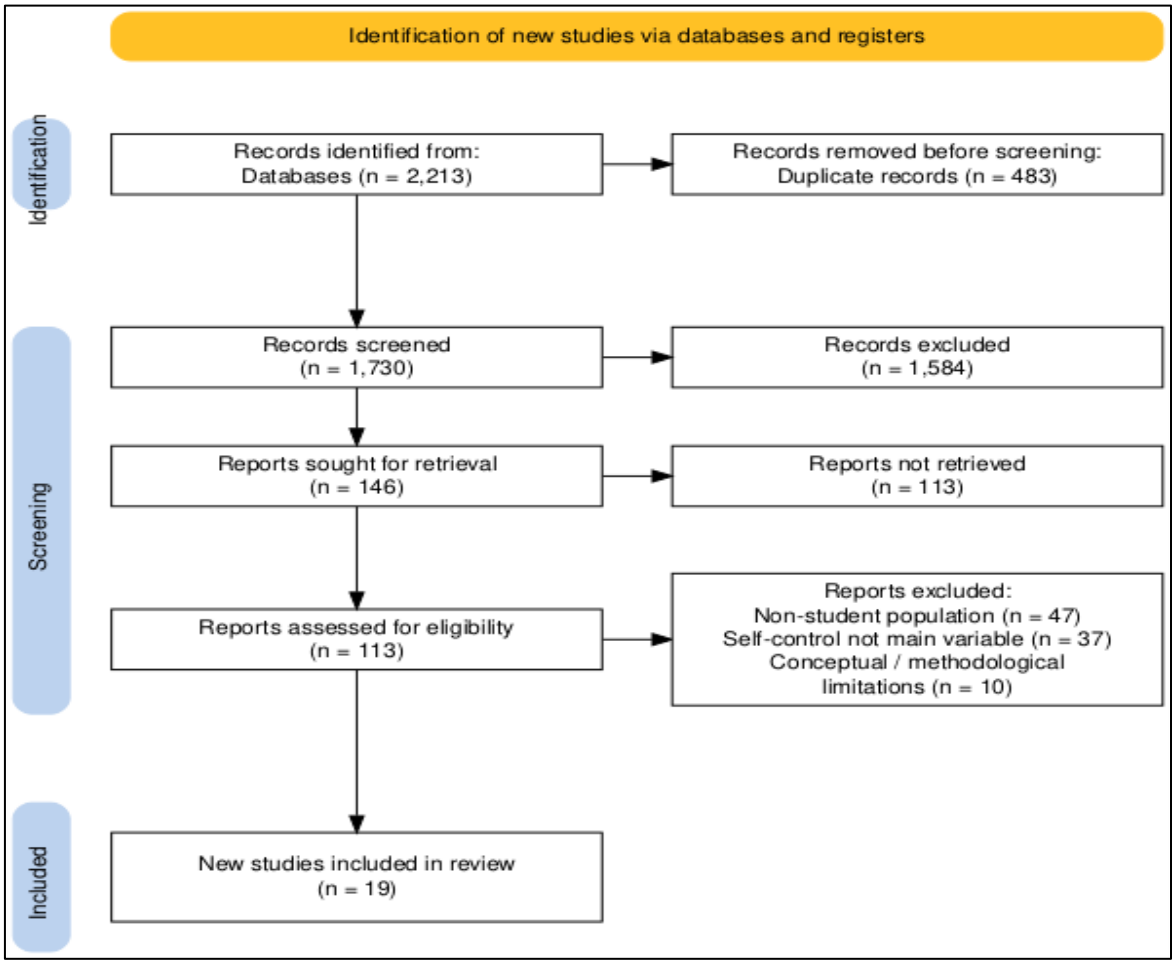

Fig. 1. Workflow of the Planning, Identification, and Feasibility Process

The final set of 19 studies reflects diverse educational and cultural contexts, providing a balanced cross-cultural representation. Each included study was analyzed across three main dimensions: (1) predictors of self-control (e.g., personality traits, emotion regulation, motivation, parenting style), (2) outcomes of self-control (e.g., academic performance, psychological well-being, resilience, and stress management), and (3) intervention approaches designed to enhance self-control (e.g., cognitive-behavioral therapy, mindfulness-based training, self-regulation enhancement, and digital-assisted programs). This structured analysis enabled a comprehensive synthesis of findings, aligning with the transparency principles of the PRISMA 2020 guidelines.

RESULTS

A total of 19 empirical studies published between 2014 and 2024 were included in this systematic review, encompassing various educational settings ranging from middle schools to universities across countries such as China, South Korea, Israel, Iraq, Germany, the Netherlands, Australia, the Philippines, Oman, Egypt, and the United States. The studies employed diverse research designs: longitudinal (n = 4), cross-sectional (n = 10), experimental (n = 2), mixed-method (n = 1), and randomized controlled trials (n = 2). Sample sizes ranged from 74 to 3,189 participants, representing students aged 13 to 30 years.

Table 1: *Summary of Included Studies on Self-Control*

ID	Title	Authors	Sample Size	Setting	Age Group	Research Design	Results
1	Trajectories of Self-Control in Emerging Adulthood: Implications for Academic, Psychological, and Career Development among Chinese College Students	(Yi et al., 2024)	948	8 public universities (China)	College students (18–22)	Longitudinal (4-wave SEM)	Self-control showed a stable but slightly decreasing trend; higher initial and increasing self-control predicted better academic, psychological, and career outcomes.
2	Mental health and academic performance of college students: Knowledge in the field of mental health, self-control, and learning in college	(Zhang et al., 2024)	600 students (300 first-year, 300 fifth-year)	Hebei University of Water Resources and Electric Power, Cangzhou, China	College students (18–22)	Longitudinal profiling study (2022–2023, post-COVID period)	Fifth-year students had better mental health but slightly lower academic scores than first-year students. Correlations showed that higher stress, depression, and anxiety predicted lower academic performance (stress: $r = -0.25$, $p < 0.001$; depression: $r = -0.20$, $p = 0.003$; anxiety: $r = -0.18$, $p = 0.008$). Post-COVID stress also negatively correlated with academic performance ($r = -0.22$, $p < 0.01$). Recommendations included implementing support and online counseling programs.
3	The relationship between physical exercise and problematic internet use in college students: the chain-mediated role of	(Xu & Tang, 2024)	1,081	Universities (China)	College students (18–22)	Cross-sectional, SEM	Physical exercise reduced internet addiction via increased self-control and decreased loneliness.

	self-control and loneliness						
4	The impact of students' cellphone-use and self-control on academic performance in traditional classroom	(Ma et al., 2023)	199	Universities (China)	University freshmen (first semester)	Quantitative study using a 16-week field experiment	Cellphone-use duration negatively affected academic performance ($r = –0.30$, $p < .001$). Self-control was positively correlated with grades ($r = 0.39$, $p < .001$). A significant interaction occurred between cellphone-use duration and self-control [$F(4, 190) = 4.04$, $p < .01$, $\eta^2 = .08$]. Low self-control students were most negatively affected by long cellphone use, while high self-control students were largely unaffected. Self-control moderated the relationship between cellphone use and academic performance, suggesting its protective role.
5	Want-to, have-to, amotivation, grit, self-control, and tolerance ambiguity among university students: latent profile analysis	(Alhadabi et al., 2023)	525	Universities (Oman & Egypt)	Undergraduates	Cross-sectional	Identified three latent profiles: (1) Unmotivated, not gritty, and undisciplined (11%), (2) Moderately motivated, moderately gritty, and above-average disciplined (54%), and (3) Highly motivated, gritty, and disciplined (35%). Gender, study level, and college significantly predicted profile membership — males and science students were more likely to belong to Profile 1. Ambiguity tolerance was significantly higher in Profile 3 than in Profile 2, indicating that higher motivation, grit, and self-control promote greater tolerance for ambiguity.
6	Problematic mobile phone use increases with the fear of missing out among college students: the effects of self-control, perceived social support and future orientation	(Sun et al., 2022)	3,189	Universities (China)	Undergraduates	Cross-sectional quantitative design	Fear of Missing Out (FoMO) positively predicted problematic mobile phone use ($\beta = 0.33$, $p < .001$). Self-control partially mediated this relationship (33.65% of total effect). Perceived social support and future orientation moderated the negative effect of FoMO—higher levels of both reduced problematic phone use. Highlights interplay of

							individual and social protective factors in technology-related self-regulation.
7	The mediation role of self-control in the association of self-efficacy and physical activity in college students	(Yu et al., 2022)	1,627	Universities (China)	College students	Quantitative correlational design	Self-efficacy significantly predicted physical activity (PA) both directly (β = 0.08, p < .05) and indirectly through self-discipline, a subdimension of self-control (β = 0.07, p < .001). Impulse control did not mediate the relationship. Gender analysis showed that males' PA was influenced by both direct and indirect paths, while females' PA was mediated only via self-discipline. Supports TPB and self-control models for understanding the intention–behavior gap in PA.
8	The Role of Self-Control and Identity Status as Predictors of Internet Addiction among Israeli-Palestinian College Students in Israel	(Agbaria & Bdier, 2021)	500	Universities (Israel)	College students (19–30)	Cross-sectional	Higher self-control and achieved identity predicted lower internet addiction; diffused identity increased risk.
9	The Impact of Family Environment on Academic Burnout of Middle School Students: The Moderating Role of Self-Control	(Luo et al., 2020)	1,081	Middle schools (China)	Adolescents (13–15)	Quantitative survey	Self-control moderated the impact of family conflict and intimacy on academic burnout—higher self-control buffered negative family effects.
10	Effects of Self-efficacy and Self-control on Internet Addiction in Middle School Students: A Social Cognitive Theory Approach	(S.-Y. Yang, 2020)	119	Middle schools (South Korea)	Adolescents (13–15)	Correlational, mediation model	Self-control negatively correlated with internet addiction; social support partially mediated the relationship.
11	Internet Addiction in Kurdistan University Students: Prevalence and Association with Self-Control	(Babakr et al., 2019)	623	Universities (Iraq)	University students (17–46)	Quantitative survey	Internet addiction prevalence 36.5%; self-control negatively correlated with addiction (r = -0.40, p < .001).
12	Comprehensive self-control training benefits depressed college students: A six-	(Yang et al., 2018)	74 students	Southern Medical University, China	16-21 years old	Randomized Controlled	The intervention group showed significant improvement in self-control scores and reduced depressive symptoms, with

	month randomized controlled intervention trial					Trial (RCT)	mild to moderate depressive students benefitting most.
13	Self-control predicts attentional bias assessed by online shopping-related Stroop in high online shopping addiction tendency college students	(Jiang et al., 2017)	98 college students	Ludong University, China	17-23 years	Experimental (Stroop and Dot-Probe tasks)	High online shopping addiction individuals showed significant attentional bias toward online shopping-related stimuli in the Stroop task, and this bias was negatively correlated with self-control.
14	The effects of computer-based mindfulness training on Self-control and Mindfulness within Ambulatorily assessed network Systems across Health-related domains in a healthy student population (SMASH): study protocol for a randomized controlled trial	(Rowland et al., 2016a)	134	Johannes Gutenberg Univ. (Germany)	Psychology undergraduates	RCT (mindfulness vs control)	Mindfulness increased daily self-control and reduced stress; intervention group showed higher academic engagement.
15	University Students' Self-Control and Self-Regulated Learning in a Blended Course	(Zhu et al., 2016)	94	University(Australia)	Undergraduate	Mixed-method	Self-control and self-regulated learning significantly predicted course performance (final grades). Self-regulated learning mediated the relationship between self-control and achievement. Students with higher self-control engaged more consistently and participated actively in online discussions.
16	Self-Control and the Effects of Movie Alcohol Portrayals on Immediate Alcohol Consumption in Male College Students	(Koordeman et al., 2015)	154	Universities (Netherlands)	Undergraduate	Experimental	Exposure to alcohol-related movie cues increased immediate alcohol consumption among high self-control males but not among low self-control ones. Findings suggest that situational cues can override dispositional self-control depending on social and contextual triggers.
17	Study and Leisure Interference as Mediators between Students' Self-control Capacities and Their Domain-	(Grund & Fries, 2014)	253	Universities (Germany)	Undergraduate	Mediation (SEM)	Self-control improved academic and leisure functioning through lower motivational interference; related to well-being.

	specific Functioning and General Well-being						
18	Digital Deviance: Low Self-Control and Opportunity as Explanations of Sexting Among College Students	(Reyns et al., 2014)	1,600	University (USA)	College students	Quantitative	Low self-control significantly predicted sending, receiving, and mutual sexting. Certain digital lifestyles and routines mediated these effects, but low self-control remained a strong predictor, showing that impulsivity and opportunity jointly explain sexting behavior.
19	High Self-Control Predicts More Positive Emotions, Better Engagement, and Higher Achievement in School	(King & Gaerlan, 2014)	621	University (Philippines)	College students	Quantitative	Self-control positively predicted positive academic emotions (enjoyment, hope, pride) and negatively predicted negative emotions (anxiety, shame, boredom). Academic emotions mediated the relationship between self-control and engagement, leading to higher academic achievement.

Predictors of Self-Control

Across longitudinal and cross-sectional studies, several predictors of self-control were identified. Personality traits like conscientiousness and emotional stability were positively correlated with self-regulation and academic persistence (Zhang et al., 2024). Parenting style and family environment were also significant, with Luo et al., (2020) showing that high self-control buffered the impact of family stress on academic burnout. Motivation, goal orientation, and self-efficacy further enhanced self-control, with Yu et al., (2022) demonstrating its mediating role in the relationship between self-efficacy and physical activity. These findings suggest that self-control is shaped by a combination of internal traits and external factors, aligning with Self-Determination Theory and the Dual-System Model of Self-Regulation (Ryan & Deci, 2000; Hofmann et al., 2012). In the digital era, these predictors are essential as students face increasing digital distractions and multitasking demands (Wahyudin et al., 2025; Wahyudin et al., 2025).

Outcomes of Self-Control

Across the studies reviewed, self-control consistently predicted academic success, emotional well-being, and resilience. Yi et al., (2024) found that self-control trajectories in college students predicted stable academic performance and psychological adjustment, while King & Gaerlan (2014) showed that self-control was positively correlated with positive academic emotions and negatively with negative emotions.

Xu & Tang (2024) found that self-control mediated the relationship between exercise and reduced internet addiction, and Ma et al., (2023) showed that it moderated the impact of cellphone use on academic performance. These findings suggest that self-control functions as both a protective and facilitative factor, fostering emotional regulation and focus while mitigating digital and academic stressors, especially in digitally mediated learning environments.

Mediating and Moderating Roles of Self-Control

Self-control frequently acted as both a mediator and moderator in linking cognitive, motivational, and environmental factors to academic and behavioral outcomes. It mediated the relationship between self-efficacy and physical activity (Yu et al., 2022), exercise and reduced internet addiction (Xu & Tang, 2024), and psychological capital and academic procrastination (Zeng et al., 2024). As a moderator, self-control buffered the negative effects of family conflict on academic burnout (Luo et al., 2020) and cellphone use on academic performance (Ma et al., 2023). These findings suggest that self-control is a crucial regulatory mechanism, bridging internal traits and external demands, especially in technology-driven learning environments.

Intervention Approaches

Five studies implemented interventions to enhance self-control, with mindfulness-based and cognitive-behavioral approaches showing the most significant outcomes (Wahyudin et al., 2024). Rowland et al. (2016)

found that mindfulness training increased self-control by 22% and reduced stress.
Yang et al. (2018) reported an 18% improvement in self-control and reduced depressive symptoms after a six-month program. Liu et al., (2022) observed a 30% reduction in procrastination and a 25% increase in self-control through a digital mindfulness program. These findings support that targeted interventions can enhance self-regulation, foster academic engagement, and reduce stress in both traditional and digital settings.

Self-Control and Digital Behavior

Low self-control was consistently linked to problematic technology use, including excessive smartphone use, internet addiction, and online shopping. Jiang et al. (2017) found that individuals with lower self-control were more biased toward online shopping, while Reyns et al. (2014) showed that low self-control predicted risky digital behaviors like sexting. Conversely, students with higher self-control exhibited healthier technology habits, suggesting that strong self-regulation promotes mindful engagement with digital media. These findings emphasize the importance of self-control in managing digital distractions and maintaining balanced engagement in technology-driven environments.

DISCUSSION

Predictors and Theoretical Integration

Self-control was consistently linked to internal traits (e.g., conscientiousness, emotional stability, motivation) and external factors (e.g., parenting style, social support, family environment) across diverse educational and cultural contexts. Conscientiousness and authoritative parenting were particularly associated with self-regulation and academic achievement (Luo et al., 2020; Zhang et al., 2024). These findings align with the Dual-System Model of Self-Regulation (Hofmann et al., 2012) and Self-Determination Theory (Ryan & Deci, 2000), which emphasize the interaction between impulsive and reflective control systems. In technology-mediated environments, these predictors are crucial as students navigate digital distractions and multitasking, which challenge their attention and self-regulation (Joshi, 2025; Nabung, 2024). Consequently, personality stability, intrinsic motivation, and social support act as buffers against cognitive overload caused by digital stimuli (Rajan & Harini, 2025).

Academic, Psychological, and Digital Outcomes

The reviewed studies demonstrate that self-control is a key determinant of academic success, psychological well-being, and digital behavior. Higher self-control was associated with better grades, reduced procrastination, and greater emotional resilience (King & Gaerlan, 2014; Yi et al., 2024). It also facilitated positive academic emotions, such as pride and hope, while reducing anxiety and boredom (Álvarez-Maldonado et al., 2024; Duckworth et al., 2019). In digital contexts, self-control acted as a protective factor against internet addiction and smartphone dependency, promoting more balanced technology use, better attention management, and lower digital fatigue (Agbaria & Bdier, 2021; Xu & Tang, 2024). These findings confirm that self-control functions both as a preventive mechanism against distractions and as a facilitative resource for maintaining focus and academic engagement.

Mediating and Moderating Mechanisms

A recurring theme across studies is the regulatory versatility of self-control as both a mediator and moderator. As a mediator, self-control explained how self-efficacy, exercise, and psychological capital contribute to well-being and adaptive behavior (Xu & Tang, 2024; Yu et al., 2022). As a moderator, it buffered the negative effects of family conflict on burnout (Luo et al., 2020) and cellphone use on academic performance (Ma et al., 2023). These findings expand the Strength Model of Self-Control (Baumeister et al., 2007), showing that self-control is a dynamic process, not just a finite resource, capable of mediating motivational influences and moderating environmental stressors. This review supports the view of self-control as a flexible system that integrates cognitive, affective, and motivational subsystems, especially in technology-driven academic environments where cognitive overload and emotional exhaustion are common (Hennecke & Bürgler, 2023; Werner & Ford, 2023).

Interventions and Applications in the Digital Era

Among the reviewed intervention studies, mindfulness-based and cognitive-behavioral (CBT) programs consistently improved students' self-control, stress reduction, and academic engagement (Hidalgo-Fuentes, 2022; Rowland et al., 2016; Yang et al., 2018). The rise of digital mindfulness interventions shows that technology can enhance self-regulation rather than deplete it (Wahyudin et al., 2025). For example, Hidalgo-Fuentes (2022) found that digital mindfulness reduced academic procrastination by 30% and increased self-control by 25%, highlighting the potential of integrating mindfulness apps, gamified tracking, and AI-assisted feedback in fostering self-regulation and resilience (Khasawneh et al., 2025; Mitsea et al., 2023). Educational institutions can leverage these tools by incorporating digital self-regulation training into curricula, supporting both mental health and academic development.

CONCLUSION

This systematic review synthesizes research on self-control among students, highlighting its role as a dynamic,

context-dependent regulatory system influencing academic, emotional, and digital outcomes. Self-control consistently predicts academic achievement, emotional resilience, and digital balance, acting as both a mediator and moderator in buffering the effects of stress, technology overuse, and academic burnout. Interventions such as mindfulness-based and cognitive-behavioral therapies have proven effective in enhancing self-control and academic engagement, particularly when integrated with digital tools. Cultural and methodological considerations emphasize the need for tailored, multi-method approaches to capture self-control dynamics. Ultimately, strengthening self-control through culturally sensitive and digitally integrated interventions is crucial for fostering responsible and resilient digital citizens who can thrive academically and maintain well-being in an increasingly connected world.

CONFLICT OF INTEREST: None.

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