# Social Cognitive Theory's Role in Shaping Digital Resiliency

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## ABSTRACT

Recent research reveals significant gaps in digital resiliency among junior high students, despite increasing digital skills. Many learners exhibit proficiency in digital tools but lack the emotional coping strategies necessary to navigate online challenges such as cyberbullying and technology overuse, leading to anxiety and academic difficulties. Social Cognitive Theory (SCT) offers a valuable framework for addressing these gaps by emphasizing self-efficacy, observational learning, and social support as crucial factors in promoting responsible digital citizenship. Empirical studies confirm that enhancing self-efficacy and peer modelling through SCT-based interventions improves students' motivation, coping mechanisms, and digital citizenship outcomes. This article discusses the theoretical foundations of SCT, the nature of digital resiliency, current gaps in learners' digital citizenship skills, and how SCT can guide effective educational practices and governance policies to create balanced, resilient digital learners.

**Keywords:** Social Cognitive Theory, Digital Resiliency, Digital Citizenship, Junior High School Students.

## INTRODUCTION

The rapid expansion of digital technology in education and everyday life has intensified the need for comprehensive digital citizenship education that goes beyond technical skills to include ethical behavior, emotional regulation, and critical thinking. Social Cognitive Theory (SCT), with its foundational concepts of self-efficacy, observational learning, and social support, offers a powerful framework to understand and cultivate these competencies essential for responsible digital citizenship among junior high students. As digital environments become increasingly complex, many learners face significant challenges related to digital resiliency, including coping with cyberbullying, technology overuse, and online stressors, which can negatively impact their mental health and academic performance. This article examines how SCT can address these gaps by empowering students to develop confidence, learn positive digital behaviors through peers and role models, and build supportive social environments that foster resilience and balanced technology use. The integration of SCT into educational policies and programs is crucial for preparing youth to engage safely, ethically, and effectively in digital spaces, ultimately promoting healthier online communities and lifelong digital citizenship.

### Theoretical Foundations of Social Cognitive Theory (Sct)

Social Cognitive Theory, formulated by Bandura (1986), explains human behavior as a result of reciprocal interactions between personal factors, behavior, and the social environment. Key elements are self-efficacy—confidence in one's ability to perform behaviors successfully—and observational learning, where individuals learn by watching peers or role models. Studies show self-efficacy has a direct, positive impact on learning motivation and behavioral outcomes (Chen & Tu, 2021). SCT's emphasis on social influence and individual agency makes it highly applicable for digital citizenship education, where behaviors are shaped through peer modelling and social reinforcement.

Empirical studies grounded in Social Cognitive Theory (SCT) consistently demonstrate that interventions focusing on enhancing self-efficacy and utilizing peer modeling yield positive outcomes in students'

motivation, coping, and digital citizenship. SCT posits that self-efficacy—the belief in one's ability to succeed (Bandura, 1997)—is a central determinant of behavior, effort, and persistence. Interventions designed to increase self-efficacy, often through successful mastery experiences and encouraging verbal persuasion, have been found to significantly improve students' motivation and academic engagement (Lee & Wu, 2024; Zechner et al., 2023). For instance, pre- and post-intervention studies have shown improvements in students' self-efficacy and active information-seeking (Fernández-Batanero et al., 2025). The influence of peer modeling is also a powerful SCT construct, as observing peers successfully perform a task raises observers' belief in their own capabilities and encourages persistence (Bandura, 1977). Research confirms that a positive peer context, including peer educational aspirations, has significant indirect effects on academic engagement, mediated by both self-efficacy and outcome expectations (Egele & Stark, 2024).

Regarding coping mechanisms and digital citizenship, SCT principles are frequently applied to foster responsible behavior. Students with higher digital competence demonstrate stronger self-efficacy, which is linked to greater autonomy, engagement, and intrinsic motivation in online environments, thereby improving key aspects of digital citizenship (El Ouaddane et al., 2025; Kim & Frick, 2023). Furthermore, SCT-based digital interventions have been shown to specifically support the development of refusal self-efficacy—a key coping mechanism involving the ability to resist risky or unwanted behaviors—by providing mastery and vicarious experiences (Laakkonen et al., 2023). These findings underscore the robust utility of incorporating self-efficacy building and peer modeling, as advocated by SCT, to enhance students' motivation, coping strategies, and responsible digital engagement.

**Nature of Digital Resiliency and Digital Citizenship**

Digital resiliency involves students' ability to adapt, recover, and manage psychological stressors in digital contexts, such as cyberbullying and excessive technology use, crucial for healthy digital citizenship (Webster, 2025). Digital citizenship encompasses ethical, safe, and responsible technology use, including emotional regulation and critical thinking online. Despite strong digital skills, many students remain underprepared in affective areas, exposing them to risks of technology dependence and related mental health issues. Research stresses the need for comprehensive programs incorporating emotional and behavioral competencies alongside technical skills (Kim & Choi, 2018).

**Gaps in Digital Resiliency Among Learners**

While junior high students increasingly possess foundational digital skills, significant gaps persist in their ability to cope emotionally and behaviorally with digital challenges. Studies indicate that many students struggle with managing online stressors, experiencing heightened anxiety linked to cyberbullying and social media pressure (Frontiers in Psychiatry, 2022). For example, prolonged screen time and social media use have been correlated with increased mental health challenges among adolescents, yet there is inadequate focus in schools on teaching emotional regulation tied to digital experiences (Destination Knowledge, 2025). Moreover, blended learning during the COVID-19 pandemic exposed limitations such as distraction, time management difficulties, and inequities in access that affect learners' digital resilience (Balanga & Cabuquin, 2024). Notably, learners often receive technical instruction without systematic support for stress management and responsible technology use, suggesting a need for balanced digital citizenship education (Webster, 2025).

**Role of Sct in Shaping Digital Resiliency**

Social Cognitive Theory offers crucial mechanisms to address these gaps by promoting self-efficacy and learning through social modeling. SCT interventions have demonstrated success in digital game-based learning, where observational learning and positive reinforcement boost not only digital skills but also students’ motivation and emotional coping (Chen & Tu, 2021). Self-efficacy enhances learners’ confidence in managing technology-related stress, reducing tendencies toward overdependence and anxiety. Social support systems shaped by SCT create environments where peer mentoring fosters resilience and responsible digital behavior. These approaches facilitate adaptive responses to digital adversity by enabling learners to internalize best practices through role models and guided social interactions (Webster, 2025). Consequently, SCT

frameworks help schools build resilient digital citizens by balancing skill mastery with emotional and behavioral readiness.

Social Cognitive Theory (Bandura) provides a practical lens to understand how Junior High School students become balanced digital citizens. The theory argues that your beliefs, social modeling, and self-efficacy all drive your digital behavior. If you believe in your ability to use technology, you use and learn from it. If you see teachers and peers modeling healthy tech use, you copy those habits and develop your own.

Recent studies align with this theory. Self-efficacy predicts how you manage technology demand (Bandura, 1997; Kay & Lauricella, 2019; Zhao, 2025). Effective digital citizens show not only technical skill but also responsible choices, resilience, and adaptive coping. In Filipino schools, digital literacy programs built on mastery and peer modeling help students grow confident and responsible (Alvarez Ramos, 2021; Marquez, 2021). Classroom interventions focusing on self-efficacy and peer mentorship reduce risky online behaviors. International research also confirms that students who experience mastery, observe good practices, and get feedback display stronger digital citizenship, handle stress, and avoid overdependence (Chen et al., 2020; Sun et al., 2022; Smyrnova-Trybulska et al., 2018).

Studies also show direct effects from positive peer modeling. When students see classmates solve problems or report cyberbullying, they are more likely to use healthy strategies and recover from digital setbacks (Wang, 2025; Zhang, 2024). Social support and role modeling increase digital resiliency. Students build habits that balance technology use, academic tasks, and social life.

Problems arise when there is high skill but low resiliency. Literature points to tech overdependence, anxiety, and academic decline when coping and control are weak (Ansari et al., 2025; Valkenburg et al., 2017; Nordstokke & Martinussen, 2025). Schools need to mix skill-building with frequent social learning, feedback, and emotion regulation lessons for best results (Eastern Visayas State University, 2025; Qamaria, 2025).

## METHODOLOGY

This study used a mixed-methods design to explore how self-efficacy, observational learning, and social support interact to build digital resiliency among junior high school students of Catumbalon National High School (CNHS) in the Philippines. The researchers employed a stratified random sampling technique to ensure a diverse sample that represented different grade levels and genders.

## RESULTS AND DISCUSSION

The researchers interviewed several learners to find out how they use technology in their daily lives, both in school and out of school. Most of the learners who took part said they mostly used technology for school-related tasks, like doing research, working with classmates, going to virtual classes, and keeping track of their assignments and schedules. Outside of school, most of the technology they used was for social media, which they used to have fun and stay in touch with friends and family through chatting and socializing.

When learners were asked about their experiences with using digital devices for lengthy periods of time, many said they had physical symptoms such as eye strain, headaches, and stiffness in their muscles and joints, which often made them more irritable. In addition to physical discomfort, mental fatigue was a common consequence, with learners describing feelings of cognitive drain, diminished concentration, and difficulty maintaining focus following extended screen time. Along with physical pain, mental exhaustion was also widespread. Students said they felt mentally drained, lost their ability to concentrate, and had trouble staying focused after long periods of time on screens.

Learners reported experiencing difficulty in disengaging from their devices when discussing their obstacles to reducing their technology usage. They emphasized a desire to consistently check for new messages or updates, as well as feelings of restlessness or ennui when they were separated from their screens. Behavioral change is particularly difficult for the majority of individuals, as technology use has become an ingrained habit.

Learners reported employing a variety of strategies to manage tension, distractions, or interruptions caused by technology. They employed several coping mechanisms, demonstrating an increasing understanding of the need to balance technology use with self-care. These strategies included resting their minds and eyes with frequent breaks, pursuing activities away from screens (such as enjoying music or family time), and intentionally minimizing distractions while focusing on key tasks. This highlights their developing ability to self-regulate their digital lives.

When interviewed on how learners handle the stress and distraction caused by technology, they responded that they adopted several strategies they acquired from others through observation, research, advice from friends or adults, and experience. They took regular breaks to rest, engaged in offline activities like spending time with family or listening to music, and prioritized key tasks to reduce distractions. These methods demonstrate a growing understanding among learners of the need for social support, balance, and self-control in managing their technology usage.

**Table 1:** Level of Digital Resiliency among CNHS Junior High School Learners

| | **Mean** | **Qualitative Interpretation** |
|---|---|---|
| **Digital Resiliency** | 3.57 | Digitally resilient |
| Legend: | | |
| Mean Interval | Descriptive Rating | Qualitative Interpretation |
| 4.51 - 5.00 | Strongly Agree | Highly digital resilient |
| 3.51 - 4.50 | Agree | Digitally resilient |
| 2.51 - 3.50 | Neutral | Moderately digital resilient |
| 1.51 - 2.50 | Disagree | Low digital resilience |
| 1.0 1.50 | Strongly Disagree | Very Low digital resilience |

The table on digital resiliency shows an overall mean score of 3.57, placing the respondents clearly in the "Digitally Resilient" category. This indicates that the participants possess a strong ability to adapt and regulate their emotions effectively within digital environments, enabling them to handle digital challenges and stressors successfully.

The moderate to strong level of digital resilience demonstrated in the table aligns with both international and local research, emphasizing the critical roles of self-regulation and emotional management. These skills are vital for the success of students and professionals in today's increasingly digital world. The findings underscore the continuing need for educational programs and technological support systems designed to cultivate and sustain digital resilience among users.

This interpretation matches broader research showing digital resilience as a dynamic process involving understanding risks, learning coping skills, recovering from stress, and progressing confidently, which supports positive behavioral and psychosocial outcomes in digital contexts.

**Table 2:** Correlation among Self-efficacy, Social Support, and Digital Resiliency among Junior High School Learners

| Variables | Self-efficacy | Digital Resiliency | Social Support |
|---|---|---|---|
| Self-efficacy | 1 | .743** | .641** |
| Digital Resiliency | .743** | 1 | .624** |

| | | | |
|---|---|---|---|
| Social Support | .641** | .624** | 1 |

** indicates significance at the 0.01 level (2-tailed); N=250.

The table shows correlation coefficients among three variables: Self-efficacy, Digital Resiliency, and Social Support. All correlations are positive and statistically significant.

Based on the data provided, it can be said that Self-efficacy and Digital Resiliency have a strong positive correlation of .743**, indicating that individuals with higher belief in their own abilities tend to show greater digital resilience, the ability to cope with and adapt to digital challenges. Similarly, Self-efficacy and Social Support show a substantial positive correlation of .641**, suggesting that greater social support is associated with higher self-efficacy. This aligns with research showing social support as a key factor in promoting confidence and capability across contexts. Further, Digital Resiliency and Social Support are also positively correlated at .624**, indicating that social networks and support systems contribute to higher levels of digital resilience.

Recent studies reinforce these findings. For example, self-efficacy has been identified as a robust resource in digital resilience, helping individuals bounce forward from digital challenges with confidence, especially when supported socially (Sun, 2022). Social support boosts self-efficacy by providing emotional and material resources that empower individuals to overcome difficulties, which in turn promotes resilience (Lin, 2024). Furthermore, research indicates that social support and digital resilience connect through various mechanisms, including increased interaction and communication in digital environments (Wang, 2025).

**Implications For Governance and Education**

Educational policies and governance must recognize the significance of SCT by implementing school programs that holistically address digital skills and emotional resilience. Teacher training should incorporate SCT to model positive digital behaviors and foster student self-efficacy. Program design should emphasize peer mentorship, experiential learning, and social support to build collective efficacy. Such governance aligns with the aim to nurture responsible, resilient digital citizens capable of ethical online engagement and stress management (Kim & Choi, 2018; Webster, 2025).

## CONCLUSION AND RECOMMENDATION

There is clear evidence that gaps in digital resiliency among learners undermine healthy digital citizenship, despite rising digital competency levels. Social Cognitive Theory provides an effective framework to bridge these gaps by enhancing self-efficacy, facilitating observational learning, and promoting supportive social environments. Educators and policymakers should integrate SCT-informed interventions, including peer modelling, emotional regulation training, and digital citizenship curricula that balance technical, affective, and behavioral skills. These approaches will cultivate resilient, confident students capable of navigating digital challenges and using technology responsibly and productively.

## REFERENCES

1. Alvarez Ramos, F. (2021). Digital Skills and Technology Dependency Among Filipino Junior High School Students. Philippine Journal of Educational Studies, 39(2), 52-68.
2. Ansari, S., Asif, S., & Khan, M. (2025). Association of stress and resilience in college students. Personality and Individual Differences, 219, 114994.
3. Balanga, U. R. D., & Cabuquin, J. C. (2024). Resilience in the Face of Adversity: Exploring Junior High Learners' Perspectives and Experiences of Blended Learning During the COVID-19 Pandemic. European Journal of Interactive Multimedia and Education, 5(1), e02402.
4. Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. Psychological Review, 84(2), 191–215.
5. Bandura, A. (1986). Social Foundations of Thought and Action: A Social Cognitive Theory. Prentice-Hall.
6. Bandura, A. (1997). Self-efficacy: The exercise of control. W.H. Freeman and Company.

7. Chen, C.-C., & Tu, H.-Y. (2021). The Effect of Digital Game-Based Learning on Learning Motivation and Performance Under Social Cognitive Theory. Frontiers in Psychology, 12, 750711.
8. Chen, W., Li, Q., Yeo, G. (2020). Self-efficacy and digital citizenship in secondary education. Journal of Educational Technology, 45, 88–97.
9. Destination Knowledge. (2025). 10 Mental Health Trends Affecting K-12 Schools in 2025.
10. Eastern Visayas State University. (2025). The information technology resilience of bachelor's in elementary education. International Journal of Research and Innovation in Social Science, 9(3), 121-132.Eastern Visayas State University. (2025). The information technology resilience of bachelor's in elementary education. International Journal of Research and Innovation in Social Science, 9(3), 121-132.
11. Egele, S. S., & Stark, J. P. (2024). The Mediating Role of Self-Efficacy and Outcome Expectations in the Relationship Between Peer Context and Academic Engagement: A Social Cognitive Theory Perspective. Children (Basel), 11(5), 629.
12. El Ouaddane, F., Benghabrit, O., & Chemsi, O. (2025). The Impact of Digital Skills on University Students' Motivation: A Systematic Review. European Journal of Educational Research, 14(1).
13. Fernández-Batanero, J. M., García-Gutiérrez, J., & Olmedo-Moreno, E. M. (2025). Fostering students' motivation and self-efficacy in science, technology, engineering, and design through design thinking and making in project-based learning: a gender-perspective study in primary education. Technology, Knowledge and Learning.
14. Frontiers in Psychiatry. (2022). Digital Resilience Among Individuals in School Education Settings.
15. Gannon, M. (2019). The Impact of Youths' Digital Citizenship Levels on Their Self-Efficacy. University of Central Florida.
16. Kay, R., & Lauricella, S. (2019). Digital wellness in schools: Implications for educational policy and practice. Computers & Education, 135, 1-10.
17. Kim, Y. M., & Frick, T. W. (2023). Digital self-efficacy and digital citizenship: The relationship and the implications for education. Educational Technology Research and Development, 71(1), 1–25.
18. Kim, Y., & Choi, A. (2018). Developing a Youth Digital Citizenship Scale: A S.A.F.E. Model Approach. Journal of Digital Learning.
19. Laakkonen, S., Suomi, A., & Kettunen, P. (2023). Systematic review of digital interventions to support refusal self-efficacy in child and adolescent health promotion. Health & Social Care in the Community, 31(6), e2866–e2878.
20. Lee, K., & Wu, C. (2024). The role of self-efficacy, motivation, and perceived support of students' basic psychological needs in academic achievement. Frontiers in Education, 9, 1385442.
21. Lin, H., Chen, H., Liu, Q., Xu, J., & Li, S. (2024). A meta-analysis of the relationship between social support and physical activity in adolescents: The mediating role of self-efficacy. Frontiers in Psychology, 14, Article 1305425. https://doi.org/10.3389/fpsyg.2023.1305425
22. Smyrnova-Trybulska, E., et al. (2018). Observational learning and digital citizenship. European Journal of Education, 53, 281–299.
23. Sun, H., Yuan, C., Qian, Q., He, S., & Luo, Q. (2022). Digital resilience among individuals in school education settings: A concept analysis based on a scoping review. Frontiers in Psychiatry, 13, Article 858515. https://doi.org/10.3389/fpsyt.2022.858515
24. Webster, J. (2025). Defining Digital Citizenship and Digital Citizenship Education. Journal of Educational Technology.
25. Zechner, M., & Gill, E. L. (2023). How Valid Is Bandura's Social Cognitive Theory to Explain Physical Activity Behavior? International Journal of Environmental Research and Public Health, 20(4), 3125.