



# A Study Of Academic Burnout Of Secondary Students In Relation To Social Media Addiction And Cognitive Load

**Author: Mrs. Laxmi Halasagi, Ph.D. Research Scholar, Co-Author: Dr. Venkoba Narayanappa**  
Education Department, Karnataka State Akka Mahadevi Women's University

## Abstract

Academic burnout among secondary school students has become an emerging concern due to increasing academic demands and rapid digitalization of learning environments. Adolescents are required to manage intensive curricular expectations while simultaneously engaging with social media platforms that demand constant attention and cognitive effort. This article, prepared for Ph.D. thesis purposes, is based on an extensive review of related literature and examines academic burnout in relation to social media addiction and cognitive load. The reviewed studies indicate that excessive social media use contributes to attentional fragmentation, increased extraneous cognitive load, emotional exhaustion, and reduced academic engagement. Cognitive overload arising from poorly structured learning tasks and digital multitasking further intensifies burnout symptoms. The paper synthesizes theoretical perspectives and empirical findings to present a coherent understanding of how these variables interact and influence students' academic well-being. Educational implications and preventive strategies are discussed with reference to secondary-level teaching-learning contexts.

**Keywords:** Academic Burnout, Social Media Addiction, Cognitive Load, Secondary Students

## Introduction

Secondary education represents a critical developmental stage in which students are expected to acquire advanced academic skills while simultaneously navigating emotional, social, and cognitive changes. In recent years, concerns related to students' mental health and academic stress have intensified, with academic burnout receiving increased scholarly attention. Academic burnout refers to a persistent state of exhaustion, reduced interest in academic activities, and a diminished sense of academic competence resulting from prolonged exposure to academic stressors.

Alongside academic pressures, the rapid expansion of digital technology has significantly altered students' learning habits. Social media platforms have become deeply embedded in adolescents' daily lives, influencing how they communicate, relax, and even learn. While these platforms can support information sharing and peer interaction, excessive use often leads to addictive patterns that interfere with academic responsibilities. Moreover, continuous engagement with digital media places heavy demands on students' cognitive systems, thereby increasing cognitive load.

This literature-based study aims to examine academic burnout of secondary students in relation to social media addiction and cognitive load. By synthesizing existing research, the paper seeks to provide a comprehensive theoretical foundation suitable for inclusion in a Ph.D. thesis.

### Academic Burnout: Conceptual Understanding

Academic burnout is conceptualized as a psychological response to chronic academic stress. It is commonly described through three interrelated dimensions: emotional exhaustion, academic cynicism, and reduced academic efficacy. Emotional exhaustion manifests as persistent tiredness and mental fatigue caused by sustained academic demands. Academic cynicism refers to a detached or indifferent attitude toward schoolwork, while reduced academic efficacy reflects students' declining confidence in their academic abilities.

At the secondary level, burnout is often associated with examination pressure, high parental expectations, competition among peers, and fear of academic failure. Literature suggests that prolonged burnout negatively affects motivation, concentration, academic performance, and overall psychological well-being. If left unaddressed, burnout during adolescence may lead to long-term disengagement from learning.

### Social Media Addiction Among Secondary Students

Social media addiction is understood as a pattern of excessive and compulsive engagement with social networking platforms that disrupts daily functioning. Adolescents are particularly vulnerable to such addictive behaviors due to their developmental need for social belonging, peer approval, and identity formation. Research indicates that students with high levels of social media use often experience difficulty in regulating screen time, prioritizing academic tasks, and maintaining consistent study routines.

The literature highlights several negative academic and psychological outcomes associated with social media addiction, including reduced attention span, sleep disturbances, increased anxiety, and academic procrastination. These outcomes indirectly contribute to academic burnout by increasing emotional strain and decreasing effective engagement with learning activities.

### Cognitive Load and Learning Processes

Cognitive load refers to the amount of mental effort required to process information during learning. According to Cognitive Load Theory, working memory has limited capacity, and learning becomes ineffective when this capacity is exceeded. Cognitive load is commonly categorized into intrinsic load, which is related to the complexity of the content; extraneous load, which arises from distractions and poor instructional design; and germane load, which supports meaningful learning.

Secondary students often experience high extraneous cognitive load due to complex curricula, multitasking, and digital distractions. Frequent interruptions from social media notifications and online interactions consume cognitive resources, leaving limited capacity for academic processing. Research suggests that sustained cognitive overload leads to mental fatigue, frustration, and disengagement from learning tasks.

### Relationship Between Social Media Addiction and Cognitive Load

The reviewed literature consistently indicates a strong association between social media addiction and increased cognitive load. Constant switching between academic tasks and social media platforms demands rapid attention shifts, which overload working memory. Such multitasking behavior reduces learning efficiency and increases mental strain.

Additionally, emotional aspects of social media use, such as social comparison and fear of missing out, further burden students' cognitive and emotional resources. This combination of cognitive and emotional load contributes to stress and exhaustion, thereby increasing vulnerability to academic burnout.

## Academic Burnout in Relation to Social Media Addiction

Research findings suggest a positive relationship between social media addiction and academic burnout. Students who spend excessive time on social networking platforms often report higher levels of emotional exhaustion and academic disengagement. Reduced study time, irregular sleep patterns, and constant mental stimulation contribute to chronic fatigue and stress.

Moreover, addictive social media use weakens self-regulation and time-management skills, making it difficult for students to cope with academic demands. As academic pressure accumulates, students may experience feelings of inefficacy and detachment, which are central features of burnout.

## Academic Burnout in Relation to Cognitive Load

High cognitive load has been identified as a significant predictor of academic burnout. When students are required to process large amounts of information without adequate instructional support, they experience confusion and mental fatigue. Over time, this leads to emotional exhaustion and reduced academic motivation.

Studies emphasize that minimizing extraneous cognitive load through effective instructional strategies can significantly reduce burnout symptoms. Clear explanations, structured content, and appropriate pacing of instruction are essential for supporting students' cognitive capacity.

## Combined Influence of Social Media Addiction and Cognitive Load

The interaction between social media addiction and cognitive load plays a crucial role in the development of academic burnout. Excessive digital engagement increases extraneous cognitive load, while demanding academic tasks further strain cognitive resources. This combined effect results in heightened stress, exhaustion, and academic disengagement among secondary students.

The literature suggests that students who are unable to balance digital activities with academic responsibilities are at greater risk of experiencing burnout. Addressing this issue requires coordinated efforts focusing on digital behavior regulation and instructional improvement.

## Educational Implications

The findings of the reviewed literature have important implications for educators, parents, and policymakers. Teachers should design learning experiences that reduce unnecessary cognitive load and encourage deep learning. Schools should promote digital well-being and responsible social media use through awareness programs.

Counseling services can play a vital role in helping students develop coping strategies, self-regulation skills, and stress-management techniques. Parental guidance and monitoring of screen time are also essential in maintaining a healthy balance between academic and digital activities.

## Conclusion

This literature-based study highlights that academic burnout among secondary students is closely linked to social media addiction and cognitive load. Excessive social media use intensifies cognitive and emotional demands, while high cognitive load resulting from academic pressure and digital multitasking exacerbates burnout symptoms. A comprehensive approach that integrates balanced digital usage, effective instructional design, and psychosocial support is essential to promote students' academic well-being. The review provides a strong theoretical foundation for empirical investigation and intervention-based research at the secondary education level.



## References

1. Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice Hall.
2. Bawden, D., & Robinson, L. (2009). The dark side of information: Overload, anxiety, and other paradoxes and pathologies. *Journal of Information Science*, 35(2), 180–191.
3. Chen, Y. F., & Peng, S. S. (2008). University students' Internet use and its relationships with academic performance, interpersonal relationships, psychosocial adjustment, and self-evaluation. *CyberPsychology & Behavior*, 11(4), 467–469.
4. Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands–resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512.
5. Kuss, D. J., & Griffiths, M. D. (2011). Online social networking and addiction—A review of the psychological literature. *International Journal of Environmental Research and Public Health*, 8(9), 3528–3552.
6. Lepp, A., Barkley, J. E., & Karpinski, A. C. (2014). The relationship between cell phone use, academic performance, anxiety, and satisfaction with life in college students. *Computers in Human Behavior*, 31, 343–350.
7. Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior*, 2(2), 99–113.
8. Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52, 397–422.
9. Moreno, M. A., & Kolb, J. (2012). Social networking sites and adolescent health. *Pediatrics*, 130(5), 1–7.
10. Paas, F., Renkl, A., & Sweller, J. (2003). Cognitive load theory and instructional design: Recent developments. *Educational Psychologist*, 38(1), 1–4.
11. Ravindran, N., & Thomas, A. (2018). Academic stress and burnout among secondary school students. *Indian Journal of Psychological Studies*, 60(2), 45–52.
12. Rosen, L. D., Lim, A. F., Smith, J., & Smith, A. (2011). The distracted student: Impact of multitasking on learning. *Educational Psychology*, 31(8), 101–117.
13. Salmela-Aro, K., Savolainen, H., & Holopainen, L. (2009). Depressive symptoms and school burnout during adolescence. *Journal of Youth and Adolescence*, 38(5), 682–692.
14. Schaufeli, W. B., Martínez, I. M., Pinto, A. M., Salanova, M., & Bakker, A. B. (2002). Burnout and engagement in university students. *Journal of Cross-Cultural Psychology*, 33(5), 464–481.
15. Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12(2), 257–285.
16. Sweller, J., Ayres, P., & Kalyuga, S. (2011). *Cognitive load theory*. Springer.
17. Tang, C. S., & Koh, Y. W. (2017). Online social networking addiction among college students in Singapore: Comorbidity with behavioral addiction and affective disorders. *Asian Journal of Psychiatry*, 25, 175–178.
18. Thomée, S., Härenstam, A., & Hagberg, M. (2011). Mobile phone use and stress, sleep disturbances, and symptoms of depression among young adults. *BMC Public Health*, 11, 66.
19. Young, K. S. (1998). Internet addiction: The emergence of a new clinical disorder. *CyberPsychology & Behavior*, 1(3), 237–244.
20. Zhang, Y., Qin, X., & Ren, P. (2018). Adolescents' academic burnout: The role of self-control and parental involvement. *Journal of Adolescence*, 64, 66–76.