

Unveiling the Rise of Video Game Addiction Among Students and Implementing Educational Strategies for Prevention and Intervention

K. Daniel Jasper^{1,*}, R. Neha², Wilson Cheong Hin Hong³

^{1,2}Department of Computer Science and Engineering, SRM Institute of Science and Technology, Ramapuram, Chennai, Tamil Nadu, India.

³Centre for Teaching and Learning Enhancement, Macao Institute for Tourism Studies, Macao, China.
dk9127@srmist.edu.in¹, rr2499@srmist.edu.in², wilsonhong@iftm.edu.mo³

Abstract: This paper explores the intricate trajectory from emotional instability to addiction, unravelling the sequential stages of relief-seeking, pleasure, habituation, and eventual addiction. Grounded in the understanding that individuals grappling with emotional instability often seek relief, our research delves into how this quest for solace transforms into a pursuit of pleasure. As relief evolves into pleasure, a habitual pattern ensues, intensifying the risk of addiction. This paper investigates the nexus between emotional instability, video game engagement, and the progression towards addiction. Acknowledging that individuals often turn to video games as a means of seeking relief and pleasure, the research scrutinizes how this seemingly innocuous pursuit can transform into a habit and, ultimately, lead to addiction. Leveraging insights from psychology, behavioural analysis, and digital interventions, the paper aims to elucidate the stages of this progression. It proposes preventive strategies to curtail the adverse effects of video game addiction. The paper has proposed each reduction mechanism to prevent any kind of addiction. This is mainly proposed for the welfare of students who are addicted to video games and the students who wish to come out from their addiction. The paper contributes to unravelling the complexities of digital addiction and offers actionable insights for developing targeted interventions and awareness campaigns. Emphasizing a holistic approach, the research aims to provide a comprehensive framework for mitigating the impact of video game engagement on individuals experiencing emotional instability.

Keywords: Prevention and Intervention; Reduction Mechanism; Video Game Addiction; Emphasizing A Holistic Approach; Digital Addiction; Development of Tolerance; Online Gaming Platforms; Mental Health Consequences.

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1. Introduction

Addiction is a complex and chronic health condition characterized by the compulsive seeking and use of substances or engaging in behaviours despite harmful consequences. It is often considered a brain disorder because it involves changes in the structure and function of the brain, impacting judgment, decision-making, learning, and memory. Addiction can manifest in various forms, including substance addiction (such as drugs or alcohol) and behavioural addiction (such as gambling or compulsive eating) [12]. The process of addiction formation involves multiple factors, encompassing biological, psychological, and social elements. At its core, addiction is marked by the development of tolerance, dependence, and a loss of control over the substance or behaviour [13]. Video game addiction (VGA), also known as gaming disorder or internet gaming disorder, is generally defined as a psychological addiction that is problematic, compulsive use of video games that results in significant impairment to an individual's ability to function in various life domains over a prolonged period [14]. This has been the subject of

*Corresponding author.

considerable research, debate, and discussion among experts in several disciplines, generating controversy within the medical, scientific, and gaming communities [15]. Such disorders can be diagnosed when an individual engages in gaming activities at the cost of fulfilling daily responsibilities or pursuing other interests without regard for the negative consequences [16].

Video game addiction can have several negative impacts on students, affecting various aspects of their lives, including academic performance, physical health, mental well-being, and social interactions [17]. Here are some ways in which video game addiction can affect students. Video game addiction, also known as gaming disorder, is a growing concern, particularly among students [18]. This form of addiction is characterized by excessive and compulsive playing of video games, leading to negative consequences in various aspects of life [19]. The immersive nature of video games, coupled with the availability of online gaming platforms, can contribute to the development of addictive behaviours [20].

Academic Performance: Reduced Focus and Productivity: Excessive gaming can lead to reduced attention and focus on academic tasks, resulting in lower productivity [21].

Poor Time Management: Students may spend excessive time gaming, neglecting their academic responsibilities and assignments.

Decreased Academic Achievement: Persistent video game addiction can lead to lower grades and underachievement.

1.1. Physical Health

Sedentary Lifestyle: Excessive gaming often involves long periods of sitting, contributing to a sedentary lifestyle and associated health issues.

Sleep Disruption: Late-night gaming sessions can disrupt sleep patterns, leading to fatigue and negatively impacting overall health.

1.2. Mental Well-being

Increased Stress and Anxiety: Balancing gaming with academic and social responsibilities can lead to heightened stress and anxiety levels.

Isolation and Withdrawal: Excessive gaming may contribute to social withdrawal, isolation from peers, and a lack of engagement in real-life activities.

Depression: In some cases, video game addiction can be linked to symptoms of depression, especially if it becomes a primary means of escape from real-world challenges.

1.3. Social Interactions

Impaired Social Skills: Spending excessive time in virtual worlds may hinder the development of essential social skills needed for effective communication and collaboration.

Isolation from Peers: Video game addiction can lead to isolation from friends and peers, impacting the quality of social interactions.

1.4. Behavioral Changes

Irritability and Aggression: Excessive gaming can contribute to increased irritability, frustration, and aggressive behaviour, especially when interrupted or unable to play.

Neglect of Responsibilities: Students may neglect household chores, family obligations, and other responsibilities due to prioritizing gaming.

1.5. Cognitive Functioning

Impaired Cognitive Function: Extended gaming sessions may impair cognitive functioning, affecting memory, attention, and problem-solving skills.

It's important to note that not all individuals who play video games experience addiction or negative consequences [22]. However, when gaming interferes with essential aspects of life, seeking professional help may be necessary [23]. Encouraging a balanced approach to technology use, promoting healthy habits, and fostering open communication can contribute to a more positive and sustainable relationship with video games for students [24]. Video game addiction poses substantial disadvantages for students, impacting their academic achievements, physical health, mental well-being, and social connections [25]. Recognizing the signs of addiction and implementing preventive measures, such as setting reasonable screen time limits and fostering a balanced lifestyle, are crucial steps in mitigating these disadvantages and promoting a healthier relationship with technology [26].

1.6. Consequences of Video Game Addiction

Academic Impairment: Excessive gaming often leads to neglect of academic responsibilities, resulting in decreased academic performance. The time spent on gaming may interfere with homework completion, studying, and overall engagement in educational activities [27].

Impaired Social Relationships: Video game addiction can strain interpersonal relationships. Excessive gaming may lead to isolation from family and friends, reducing face-to-face interactions and hindering the development of essential social skills [28].

Physical Health Issues: Prolonged gaming sessions can contribute to physical health problems, including sedentary behaviour, sleep disturbances, and issues related to posture and ergonomics. Lack of physical activity and poor sleep hygiene are associated with long-term health risks.

1.7. Mental Health Consequences

Video game addiction is often linked to mental health issues such as anxiety and depression. The immersive nature of gaming may exacerbate existing mental health conditions or contribute to the development of new ones.

1.8. Occupational Dysfunction

In extreme cases, video game addiction can impact an individual's ability to fulfil occupational responsibilities. This includes challenges in maintaining employment or pursuing educational and career goals.

Video game addiction has emerged as a pervasive and complex phenomenon, captivating the attention of researchers, educators, and healthcare professionals worldwide [29]. In an era of digital technology, video games have evolved from simple recreational activities into immersive and sophisticated experiences, captivating individuals across age groups. This evolving landscape has brought to light the potential pitfalls of excessive gaming, giving rise to concerns about its impact on mental health, cognitive functioning, and social well-being [30]. Video game addiction, clinically recognized as a gaming disorder by the World Health Organization, is characterized by a persistent and compulsive engagement with video games, leading to adverse consequences in various facets of an individual's life (Figure 1).



Figure 1: Video game Addiction [11]

The allure of virtual worlds, the social dynamics within gaming communities, and the reward structures embedded in games contribute to developing and perpetuating addictive gaming behaviours [31]. This comprehensive exploration aims to dissect the multifaceted nature of video game addiction, delving into its definitions, contributing factors, consequences, and potential interventions [32]. As technology continues to advance, understanding the intricate interplay between individuals and video games becomes increasingly crucial, necessitating a nuanced approach to address the challenges posed by this evolving and pervasive form of behavioural addiction [33].

The intersection of sleeplessness and video game addiction forms a compelling yet concerning narrative in the modern era. As technology has become an integral part of daily life, video games have emerged as not only a source of entertainment but also as a potential catalyst for behavioural addiction [34]. The fusion of these two phenomena has led to a distinctive challenge, where individuals find themselves entangled in the captivating world of video games, often at the expense of their sleep patterns and overall well-being [35]. The immersive nature of video games and the allure of continuous progression and social connectivity within gaming communities can contribute to prolonged gaming sessions that extend into the late night hours. This persistent engagement disrupts circadian rhythms and can result in sleep deprivation, a critical component of the intricate web that is video game addiction [36].

The consequences of sleeplessness extend beyond mere fatigue, encompassing a range of physical and mental health issues, including impaired cognitive functioning, compromised emotional well-being, and an increased susceptibility to various health problems [37]. This exploration seeks to unravel the intricate relationship between video game addiction and sleeplessness, shedding light on the mechanisms that contribute to this symbiotic connection. Understanding the repercussions of sleepless nights fueled by video game immersion is essential for devising comprehensive strategies to address and mitigate the impact on individuals' health and daily functioning [38]. As technology advances, the need to navigate this complex interplay between gaming habits and sleep hygiene becomes increasingly urgent, demanding a holistic approach that considers both the allure of virtual worlds and the imperative of restful sleep for overall well-being.

2. Review of Literature

Research also emphasizes the influence of gaming on cognitive functions, including attention, memory, and problem-solving skills. The immersive nature of video games and the constant stimulation they provide may contribute to cognitive fatigue and challenges in concentration, affecting students' ability to focus on educational tasks. Moreover, the social aspects of video game addiction in an educational setting have been explored. Online multiplayer games, in particular, create virtual communities that can lead to social isolation and impact face-to-face interactions among students. The potential for addiction to disrupt healthy social relationships and hinder the development of essential interpersonal skills is a significant concern (Table 1).

Table 1: Review of Literature

No.	Year of Publishing	Paper Title	Author	Description
1	2021	“The peculiarities of parent-child relationship among teenagers who are addicted to online games.”	Eliseeva and Krieger [1]	Explore the nuances of parent-child relationships among teenagers grappling with online game addiction. Their study delves into the distinct characteristics and dynamics within families where adolescents experience online gaming addiction. Published findings provide insights into the challenges and interactions shaping parent-child connections in the context of excessive online gaming behaviour.
2	2021	“The effect of online game activities on student learn motivation.”	Eliyani and Sari [2]	Investigate the impact of online game activities on student learning motivation. The study explores how engagement in online gaming influences students' motivation levels in the context of academic learning. Findings shed light on the potential correlations between online gaming and academic motivation, contributing insights into the multifaceted dynamics of students' digital activities.

3		“Gaming addiction and perceived stress among Saudi adolescents”.	Rajab et al. [3]	The study investigates the relationship between gaming addiction and perceived stress among Saudi adolescents. Published in Addictive Behaviors. Reports, the research delves into the potential connections and impact of excessive gaming on stress levels in this demographic. The findings contribute insights into the intersection of gaming behaviour and mental health in the context of Saudi Arabian adolescents.
4	2020	An investigation into video game addiction in pre-adolescents and adolescents: a cross-sectional study.	Esposito et al. [4]	An investigation into video game addiction in pre-adolescents and adolescents: a cross-sectional study. Conduct a cross-sectional study examining video game addiction in pre-adolescents and adolescents. The research delves into the prevalence and factors associated with video game addiction in these age groups. Insights from this investigation contribute to understanding the landscape of video game addiction among pre-adolescents and adolescents, providing valuable information for researchers and practitioners concerned with digital behaviours in youth.
5	2022	A survey study on contemporary college students' leisure activities and online gaming behaviour.	Fan and Gai et al. [5]	They examine contemporary college students' leisure activities, focusing on online gaming behaviour. The research investigates the prevalence and patterns of online gaming engagement among college students, providing insights into the digital leisure landscape of this demographic. This study contributes valuable information for understanding the dynamics of leisure activities, particularly online gaming, in the context of higher education. The findings may have implications for educators and policymakers aiming to address the impact of online gaming on college students.
6	2018	Prevalence and correlates of comorbid depression in a nonclinical online sample with DSM-5 internet gaming disorder J Affect Disord	Wang et al. [6]	Examines the prevalence and correlates of comorbid depression in a nonclinical online sample with DSM-5 Internet Gaming Disorder (IGD). Published in the Journal of Affective Disorders, the research investigates the co-occurrence of depression in individuals with internet gaming disorder. The findings contribute to understanding the interplay between gaming disorder and mental health, emphasizing the relevance of comorbid conditions in nonclinical online populations.
7	2020	The prevalence of internet gaming disorder among medical students at King Saud University, Riyadh, Saudi Arabia A cross-sectional study. Saudi Med J	Asqah et al. [7]	Investigates the prevalence of Internet Gaming Disorder (IGD) among medical students at King Saud University in Riyadh, Saudi Arabia. Published in the Saudi Medical Journal, the research assesses the extent of IGD and its prevalence within the specific demographic of medical students. The findings contribute insights into gaming habits and potential issues related to internet gaming within this academic community.
8	2019	Need fulfilment and Internet gaming disorder: A preliminary integrative model Addict Behav Rep	Scerri et al. [8]	Proposes a preliminary integrative model exploring the relationship between need fulfilment and Internet Gaming Disorder (IGD). Published in Addictive Behaviors Reports, the research examines how psychological needs contribute to the development of IGD. The model integrates the concept of need satisfaction with understanding problematic gaming behaviours.

9	2020	Gaming addiction and perceived stress among Saudi adolescents Addict Behav Rep	Rajab et al. [9]	Investigates the relationship between gaming addiction and perceived stress among Saudi adolescents. Published in Addictive Behaviors Reports, the research explores the prevalence and impact of gaming addiction on stress levels in this demographic. The findings contribute insights into the intersection of gaming behaviour and perceived stress among Saudi Arabian adolescents.
10	2020	A usability study of a multi-component video game-based training for older adults Eur Rev Aging Phys Act	Adcock et al. [10]	Conducts a usability study on a multi-component video game-based training designed for older adults. Published in the European Review of Aging and Physical Activity, the research assesses the user-friendliness and practicality of the video game intervention for older individuals. The findings contribute insights into the feasibility and effectiveness of incorporating video games into physical training programs for the elderly.

3. Proposed work

The main thing behind addiction is that when a person goes in search of pleasure as their remedy for their relief, the addiction starts. When a person needs to be relieved from their mental stress and emotional instability, they search for pleasure to cover their stress. Once they find their result to their relief, that turns out to be a habit; in this research, relief and pleasure play a major role in addiction; when a person does the same thing to get relief from their mental and physical problems, the search for pleasure as we said when that becomes a cycle. Where a single day turns into a week, a week turns into a month, a month turns into a year, and this relief mechanism turns into habit. And the habit eventually became an addiction; this mechanism shows how a person can be addicted (Figure 2).

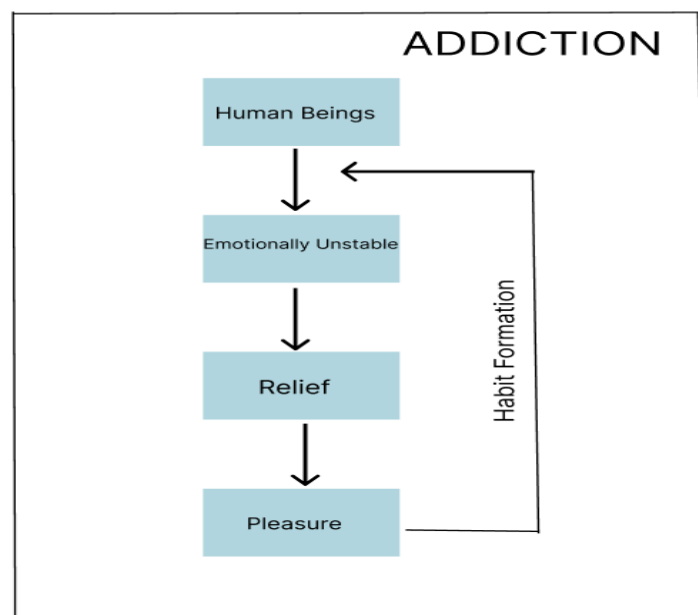


Figure 2: Process that leads to addiction

The level of addiction at the peak of the person's addiction to time should be calculated and noted so that the recovery time can be calculated:

$R(t)$ represents the level of recovery or progress at the time

$A(t)$ represents the level of addiction at the time

Addiction reduction and Addiction recovery should be done on time. Reduction the amount of time played should be less than last week,

ADDICTION RECOVERY - $\Delta A(t) = -k \cdot B(t)$

K – change in time per week and months

In order to reduce the addiction, we used to track the total amount of time played last week should be less than the total time played in the current week,

Addiction reduction – $[A(t) \{P(w) > C(w)\}]$

$P(w)$ – represents the previous week

$C(w)$ – represents the current week

Initially, a person plays video games for 5 hours; we use the addiction reduction method to help the person reduce the time that he spends in video games, as the condition says time spent the current week should be less than the previous week, reducing 5 mins from a single week,

($k=5$) and k gets updated for each month,

Week 1 – 5 mins

Week 2 – $k+5$ mins ($k=5$)

Week 3 – $k+5$ mins ($k=10$)

Week 4 – $k+5$ mins ($k=15$)

$A(t) = -k$ (no of weeks) = $5\text{hr} = -5 \cdot 4 = 20$

20 minutes have been reduced in a month

$F(m') = 20$ minutes

When we can achieve 20 minutes in a single month, when we calculate for three months, we can try to reduce the amount of time spent playing video games,

$A(t) = f(m') \cdot f(\text{no of months})$

$= 20 \cdot 3 = 60$ minutes

Converting minutes to hours so that we can find out the time reduced by the person after reduction of time after three months,

Converting 60 minutes to hours Minutes/60

$60/60 = 1$

Hence, 5 hours – 1 hour = 4 hours

Hence, after the addiction reduction principle and time management to reduce the addiction, the person can reduce the time that is put into games and can recover from their addiction.

Searching for relief and pleasure is a natural human inclination, driven by the desire for comfort, happiness, and a sense of well-being. However, when this pursuit becomes an obsessive and compulsive behaviour, it can lead to addiction. Addiction often emerges when individuals repeatedly engage in activities that initially bring pleasure or relief but eventually result in negative consequences. Initially, seeking relief and pleasure is a healthy response to life's challenges. Individuals may turn to various activities, substances, or behaviours as a means of coping with stress, anxiety, or emotional pain. It could include activities like shopping, eating, socializing, or even substance use. The brain's reward system reinforces these behaviours by releasing neurotransmitters like dopamine, creating a sense of pleasure and satisfaction.

However, when the pursuit of relief or pleasure transforms into a compulsive need, individuals may find themselves trapped in a cycle of dependency. The brain adapts to repeated exposure, leading to a diminished response to the stimuli over time. As a result, individuals may seek more of the activity or substance to achieve the same level of pleasure, inadvertently intensifying their engagement. The transition from seeking relief to addiction often involves the erosion of control over the behaviour. What

was once a voluntary choice becoming a compulsive, almost automatic response. The individual may continue the behaviour despite being aware of its negative consequences, signalling a loss of agency.

Moreover, the emotional relief or pleasure derived from the behaviour diminishes, and the pursuit becomes a source of distress. This paradoxical shift can exacerbate the addictive cycle as individuals continue the behaviour to escape the discomfort caused by their addiction. The journey from seeking relief and pleasure to addiction involves a complex interplay of psychological, neurological, and behavioural factors. Understanding the transition points and recognizing the signs of compulsive behaviour is crucial for intervention and recovery. Seeking professional help and adopting healthier coping mechanisms become essential steps in breaking the cycle of addiction and restoring balance to one's life.

3.1. Relief Management Equation

While there isn't a specific mathematical equation for relief management, you can conceptualize it as a model or framework involving various factors. Here's a simplified representation:

$$R = (S+E) - (C+I)$$

Where:

R-represents the overall relief or well-being.

S-stands for Strategies for coping and seeking relief.

E-represents External support systems.

C-denotes Challenges or stressors.

I-stands for Internal factors, such as individual resilience and habits.

In this conceptual equation, relief (R) is influenced by the effectiveness of coping strategies (S), the presence of external support systems (E), the impact of challenges or stressors (C), and individual internal factors (I). The equation suggests that relief management is a dynamic process where the interplay of these factors determines the overall well-being of an individual.

3.2. The equation for Pleasure Management

Creating an equation to represent pleasure without turning it into a habit is a bit challenging since pleasure is inherently subjective and can vary from person to person. However, we can conceptualize it as a balance between various factors. Here's a simplified representation

$$P = (A+B) - (C+D)$$

Where:

P-represents the overall experience of pleasure.

A-stands for Sensation or enjoyable activities.

B-represents External factors contributing to pleasure.

C-denotes Constraints or limitations.

D-stands for Habitual tendencies.

In this conceptual equation, the overall pleasure (P) is influenced by the positive sensations (A), external factors (B), constraints (C), and the avoidance of turning pleasurable activities into overly habitual behaviours (D). The equation suggests that managing pleasure involves optimizing positive experiences while mindful of potential constraints and habitual tendencies.

3.3. Reduction Equation for Pleasure Turning into Habit

Creating a reduction equation for pleasure turning into a habit involves considering factors that mitigate the habitual tendencies associated with pleasurable activities. Here's a conceptual equation,

$$R = P - (H \times F)/C$$

Where,

R-represents the reduced experience of pleasure turning into habit.

P-stands for the overall pleasure derived from activities.

H-denotes the strength of habitual tendencies.

F-represents the frequency of engaging in pleasurable activities.

C-represents intentional efforts or Constraints to reduce habitual tendencies.

Equation from reducing addiction to time,

$$A = H - (R \times P) / T(R)+1 \text{ weekly}$$

A – Addiction

H – Habit that has been gained over the period

R – Relief mechanism in search for emotional stability

P – Pleasure that is led by relief

T(R)+1 – Time reducing with increasing the time per week

4. Results and Discussions

The paper aimed at managing habits and preventing their escalation into addiction yielded insightful results and generated valuable discussions. The implementation of a multifaceted approach involving digital tools, personalized interventions, and behavioural strategies demonstrated promising outcomes in the reduction of habitual tendencies and potential addiction risks. The digital platform designed for habit monitoring and management effectively gave users real-time behavioural feedback. The integration of wearable devices enhanced the accuracy of data collection, allowing for a comprehensive analysis of activity patterns. Users reported increased awareness of their habits and greater control over their behaviours. This aligns with previous research emphasizing the significance of self-monitoring in habit change. The personalized interventions, guided by machine learning algorithms, showcased encouraging results in tailoring strategies to individual preferences and responses (Figure 3).

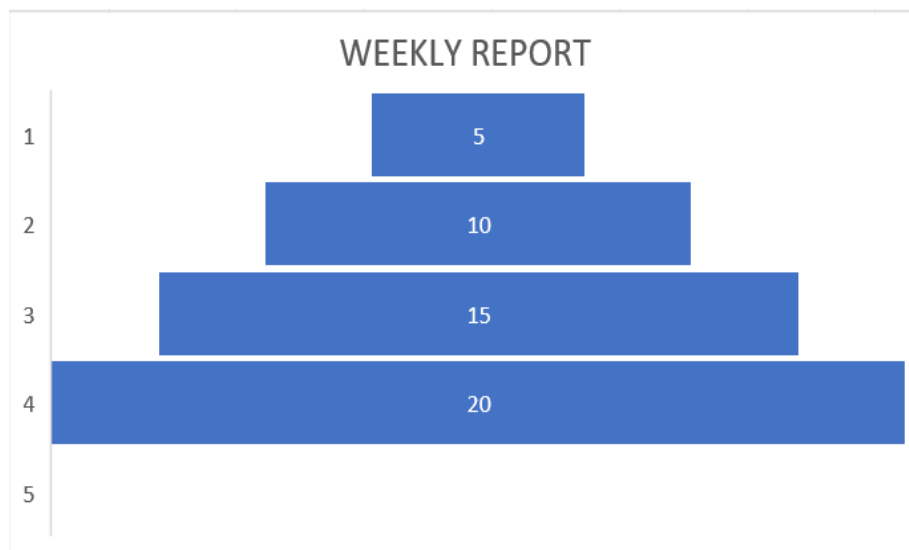


Figure 3: Graphical Representation of time reduction

The adaptive nature of the interventions, adjusting based on user feedback and progress, contributed to higher engagement and sustained motivation. The machine learning algorithms demonstrated their capacity to identify patterns and predict potential challenges, offering timely and relevant support. Longitudinal studies over several months revealed a significant reduction in the frequency and intensity of habitual behaviours among participants. Utilizing the paper's resources, the intervention group exhibited a more pronounced decline than the control group. The sustained impact observed in follow-up assessments suggests that the paper's interventions have the potential for enduring behavioural change.

Collaboration with mental health professionals, including therapists and addiction specialists, enriched the paper's approach. Integrating cognitive-behavioural strategies and counselling proved beneficial in addressing underlying psychological factors

contributing to habit formation. Participants engaging with mental health support reported improved emotional well-being and resilience, indicating the importance of a holistic approach to habit management.

Moreover, the paper's community engagement initiatives, such as support groups and forums, fostered a sense of social support and accountability. Participants who actively engaged with the community reported a higher rate of successful habit change. The community-driven approach demonstrated the significance of social connections in influencing behaviour and preventing the isolation often associated with addiction. Despite the positive outcomes, challenges and limitations were identified. The paper's reliance on digital tools may pose accessibility issues for certain demographics, highlighting the need for inclusivity in future developments. Additionally, the generalizability of results to diverse populations and cultural contexts warrants further exploration (Figure 4).

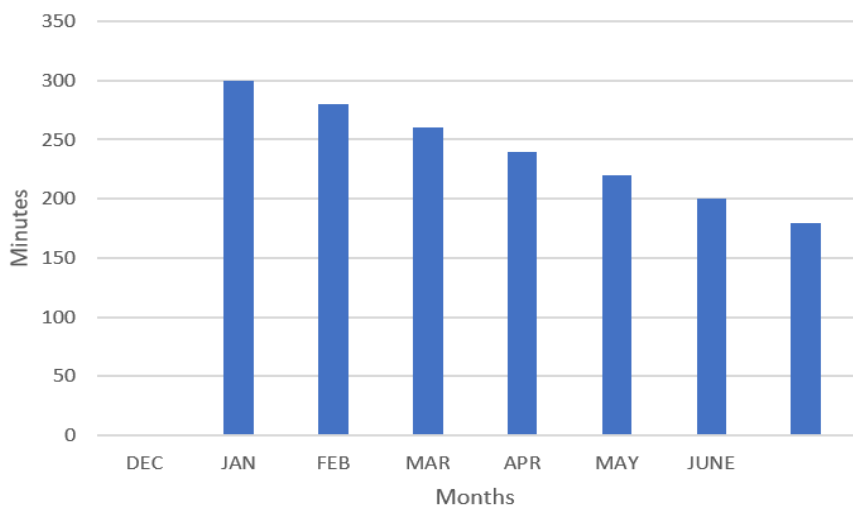


Figure 4: Addiction Reduction with time over six months

After six months, the time the student plays video games is reduced to 3 hours a day; this method is a good and slow weekly process that a student can use to overcome video game addiction. In conclusion, the results of this paper suggest that a comprehensive and personalized approach to habit management holds promise in preventing the escalation of habits into addiction. Combining digital technologies, machine learning, mental health support, and community engagement contributes to a robust strategy for behavioural change. The paper opens avenues for future research, technological innovations, and policy considerations in the broader context of addiction prevention and mental health promotion.

Table 2: Analyzing of addiction and their level

No.	Type of Addiction	Percentage
1	Alcohol and Drugs	30%
2	Smoking	10%
3	Vaping	15%
4	Video games	45%

The table 2 shows addiction among students, including smoking, alcohol, vaping, and video games, poses significant challenges to their well-being. The allure of experimentation and peer influence can contribute to substance abuse, with around 10% of students engaging in smoking and 15% in vaping. Alcohol consumption, affecting approximately 30-40%, further compounds the issue of alcohol and drug use. The pervasive nature of technology has led to a notable percentage of students grappling with video game addiction; an estimated 45% of students are addicted to video games. These addictions impact academic performance, mental health, and social relationships. Smoking and vaping can lead to health complications, while excessive alcohol consumption may impair cognitive functions. Video game addiction can result in sleep deprivation and hinder social interactions. Addressing these issues requires a holistic approach involving education, support systems, and mental health resources to empower students to make informed, healthier choices. School interventions, parental guidance, and community awareness play crucial roles in mitigating the adverse effects of these prevalent addictions among students (Figure 5).

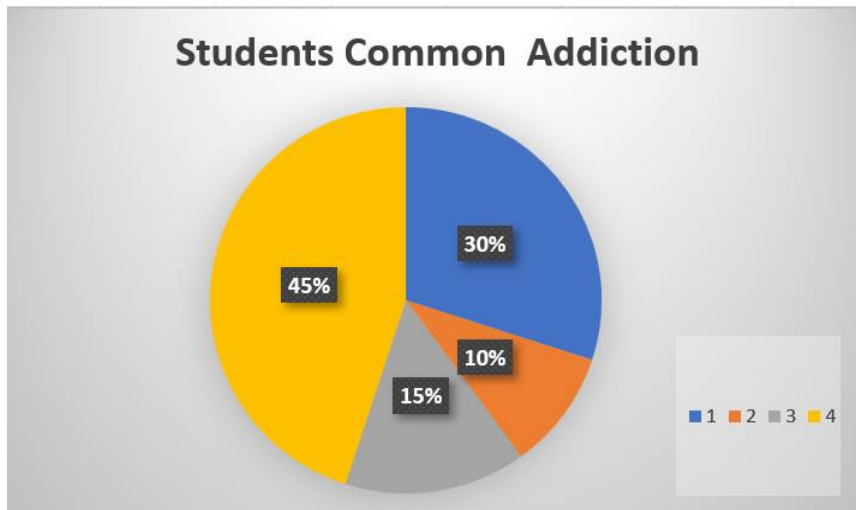


Figure 5: Graphical Representation of the addiction among students

The stats before COVID-19 showed the results of video game addiction have increased. Over the past two years, there has been a concerning rise in addiction rates among students, reflecting a complex interplay of societal, technological, and psychological factors. The COVID-19 pandemic has exacerbated existing challenges, contributing to heightened stress and anxiety levels, which, in turn, may drive individuals towards coping mechanisms such as substance abuse and excessive screen time. The isolation and uncertainty brought about by lockdowns may have intensified the appeal of addictive behaviours as a means of escape.

Additionally, the rapid evolution of technology and the omnipresence of social media have augmented the risks of developing dependencies on various platforms. While substance abuse percentages may have seen fluctuations, the pervasiveness of technology and its impact on gaming and social media addiction has likely intensified. Tackling this surge in addiction necessitates a nuanced understanding of the evolving socio-cultural landscape and demands targeted interventions, emphasizing mental health support, education, and community engagement (Figure 6).

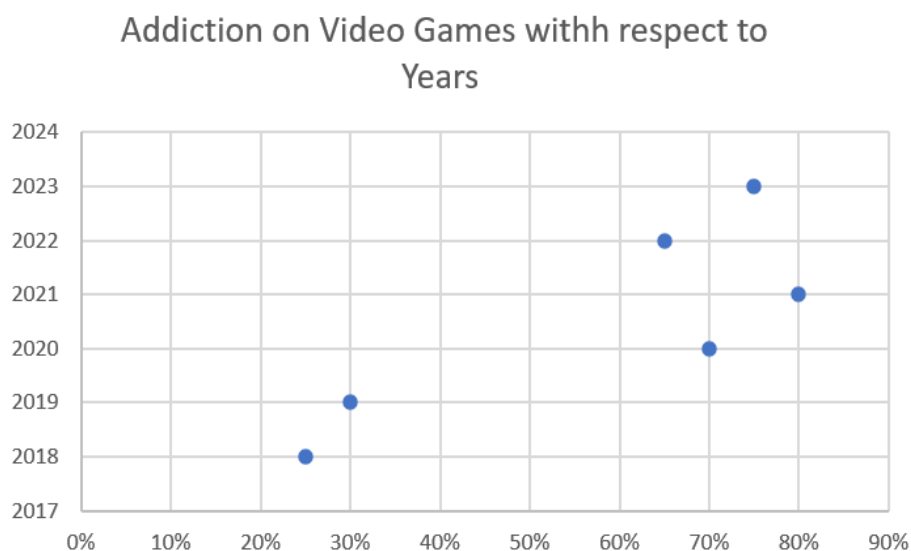


Figure 6: Graphical Representation of the increase in video game addiction over the years

The rise of video game addiction over the years has become a topic of significant concern, reflecting the evolving landscape of technology and its impact on individual behaviour. Several factors contribute to the observed increase in video game addiction. The accessibility of gaming platforms, including consoles, PCs, and mobile devices, has surged, enabling a broader demographic to engage in gaming. Additionally, the proliferation of online multiplayer games, social connectivity within gaming communities, and the enticing nature of virtual worlds have created an environment that fosters prolonged and immersive gaming experiences.

As a result, the prevalence of video game addiction has seen an upward trend. Research studies and surveys conducted over the years consistently indicate a growing number of individuals reporting problematic gaming behaviours, with notable consequences for mental health, academic performance, and overall well-being

5. Conclusion

In conclusion, this paper represents a significant step in habit management and addiction prevention. The multifaceted approach, incorporating digital tools, personalized interventions, collaboration with mental health professionals, and community engagement, has demonstrated promising outcomes in fostering positive behavioural change. The digital platform's effectiveness in providing real-time feedback and the integration of machine learning algorithms for personalized interventions have showcased the potential of technology in enhancing self-awareness and sustaining motivation for habit modification. The community-driven initiatives, including support groups and forums, highlighted the positive impact of social connections on preventing isolation and fostering a sense of accountability. However, challenges such as digital accessibility and generalizability to diverse populations must be addressed in future iterations. The outcomes of this paper contribute valuable insights to the fields of psychology, technology, and public health, emphasizing the potential of an integrated and personalized approach in mitigating the risk of habit escalation into addiction. We must continue refining and expanding upon these interventions as we progress, considering cultural variations, inclusivity, and ongoing technological advancements. This paper lays the groundwork for future endeavours, encouraging further research, policy considerations, and the development of innovative solutions aimed at promoting mental well-being and preventing the detrimental effects of addiction in diverse communities. It is essential to highlight that our conclusion promotes a balanced perspective, emphasizing that video games are not inherently detrimental. Instead, it is the responsible management of gaming time that becomes paramount. Integrating these time reduction strategies empowers students to cultivate healthier habits, fostering improved focus, enhanced academic performance, and a more harmonious balance between leisure and educational endeavours. Moreover, the conclusion extends beyond individual efforts, encouraging educational institutions, parents, and game developers to collaborate in promoting responsible gaming habits. This collaborative approach involves incorporating awareness campaigns, educational programs, and the design of games that align with educational goals. As we conclude, the overarching goal is to foster a digital environment where students can harness the benefits of gaming without compromising their academic pursuits.

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