

## “UNPLUGGING THE WEB: INVESTIGATING THE IMPACT OF INTERNET ADDICTION AND ACADEMIC STRESS ON SECONDARY SCHOOL STUDENTS’ ACADEMIC PERFORMANCE”

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**Abstract:** The study aimed at investigating the internet addition & academic stress as determinants of academic performance among sec. school students. 700 Sec. School Students (345 Males & 355 Females) of 9th class was selected (by multistage random technique) from C.B.S.E. affiliated schools of Rohtak and Sonapat districts of Haryana State. In order to assess the Academic performance, the researcher had gathered data from school examination record of the respective schools. Internet Addiction Scale by Gulati, Kurisunkal & Bakliwal (2021) and Scale for Assessing Academic Stress (SAAS) by Sinha, (2014) were used to collect the data. Outcome of the investigation revealed that female students score better in academics than male students. Compared to male students, female students had a greater online addiction. Additionally, compared to male students, female students were reported to have higher level of academic stress. It was also found that internet addiction & academic stress both variables were negatively but significantly correlated with academic performance.

**Keywords:** *Academic Performance, Academic Stress, Internet Addiction, Secondary School Students*

### INTRODUCTION

Through the evolution of the world, school education has been playing a vital role to change one’s life to be a better one. It acts as a turning point for each individual to move to the next stage of their education and further their career in the future. The centre of the education system revolves around pupils' academic success. The success or failure of every educational institution is determined by how well its pupils are doing academically. Academic performance reveals the student’s level of skills or the range of information of what he/she has accomplished in any designated area of learning or behavior. It is a multifaceted concept that includes various learner aspects that contribute to academic success. It is the result of a combination of psychological, social, and economic factors that lead to holistic growth of students. According to Talib & Sansgiry (2012), “Academic performance is the degree to which a learner, instructor, or institution has met their short- or long-term learning objectives. It is determined by continuous evaluation or cumulative grade point average (CGPA)”. The growth of pupils is significantly influenced by their academic success. It influences teenagers' academic and professional trajectories and reflects their cognitive capacity. Students who are happy with their academic success typically exhibit greater drive, self-worth, and confidence.

### INTERNET ADDICTION

These days, the Internet has drastically altered peoples' lives. Although there are many advantages to using the Internet, people are aware of the risks associated with excessive or inappropriate use in terms of one's health and wellbeing. Numerous educational uses of the internet exist, such as virtual tours, online courses, collaborative learning, language learning, exam preparation, and time management and organisation. The internet offers students easy access to a multitude of information and tools that can enhance their learning. In addition to having access to online learning environments that offer personalised and flexible learning experiences, students may virtually communicate and collaborate with their professors and classmates.

Internet addiction (IA) is a prevalent issue that stems from an individual's inability to regulate their use of the Internet, leading to challenges in social, psychological, academic, and professional spheres (Chou and Hsiao, 2000). Concerns about IA are developing among professionals and the general public globally. Pupils may

benefit from using the internet to develop digital literacy skills, which are crucial in today's interconnected society. Pupils may experience negative consequences from the internet, including addiction, diversion, false information, cyberbullying, health problems, and hazards to their online privacy and security. Someone may develop an internet addiction if they spend a lot of time on gadgets linked to the Internet. "Excessive and problematic internet use displaying features such as preoccupation and an inability to cut back on their usage of the internet" is the definition of internet addiction (Murali, 2007). Therefore, excessive obsessions, behaviours related to computer usage & internet access that result in impairment are characteristics of internet addiction. The world is becoming more concerned about excessive internet usage, and internet addiction has a detrimental effect on scholastic achievement.

### **TYPES OF INTERNET ADDICTION**

The phrase "internet addiction" is wide and encompasses a variety of behaviours and issues with impulse control related to mobile, personal computer, and internet technology. Researchers have found a few distinct forms of internet addictions, even though there are currently no officially recognised diagnostic standards for the condition.

- 1. Cyber (Online) Relationship Addiction:** Addicts to cyberspace or online connections are engrossed in establishing and sustaining relationships virtually, frequently overlooking and undervaluing their real life friends and family. A person may have poor social skills and irrational expectations after becoming engrossed in their online identity and social life. This frequently results in a person's incapacity to form relationships in real life, which increases their reliance on virtual ones.
- 2. Compulsive Information Seeking:** Information-seeking may occasionally be an outward sign of underlying OCD symptoms. In addition to impairing their talents, compulsive information-seeking may also result in great accomplishment.
- 3. Gaming Addiction:** As computers became more accessible, software for games like Minesweeper, Tetris, and Solitaire was installed. Researchers soon discovered that, in some situations, playing computer games compulsively was becoming problematic.

Thus, we discovered that a child's physical and mental health, including their capacity to sleep, their attention span, their likelihood of being fat, their irritability, and their likelihood of experiencing anxiety and depression, are all adversely affected by Internet addiction. Acc. to a study by Zhou et al. (2022) that was published in the Journal of Affective Disorders in 2022, more internet screen time before bed is linked to higher levels of weariness, which in turn shortens sleep duration.

### **ACADEMIC STRESS**

In general, stress is the body's reaction to feeling under pressure and being unable to adjust. Both the lives of the pupils and their academic achievement may be greatly impacted by this. According to N.D.T.V., a lot of parents believe their child ought to be at the top of the class. Naturally, that cannot occur. "If they don't, students turn to suicide as a means of escape." 2471 suicides in 2013 alone had the reason "failure in examination". They have to pass from high stress in order to perform better in examinations, board exams and competitions. Academic stress is a common problem for school students that may affect their academic achievement. Parents posed their wards to get good grades and achieve higher in academics. To fulfill the desire of the parents students have to pass from high stress (timesofindia.indiatimes.com). Academic stress could be broadly defined as the mental state of a student under a highly tense learning environment including the fear of the possibility of having to fail in academic performance. Academic stress is characterised as the body's reaction to pressures associated to academics that are greater than students' capacity for adaptation (Derek, Rott & Michale, 2022). Appropriate stress could motivate oneself to be more prominent in his or her academic performance to reach the study goal. However, excessive academic stress brings detrimental

consequences for both mental and physical problems such as depression, stress, and anxiety-related disorder. Acc. to Yang et al. (2021), the most important everyday issues are those associated to academic demands, such as continuous study, composing papers, getting ready for examinations & tedious instructors. Exam and test preparation, grade-level competition, and rapid content acquisition all contribute to academic pressure. The effects of stress on pupils' academic performance can be either positive or negative. First off, students' academic performance may suffer if they are unable to manage and overcome these stressors, which might result in an inability to finish assignments and receive good scores.

### **TYPES OF STRESS**

Seyle 'the father of stress' said that stress is the spice of life and its absence is similar to death (Kumar H. Mahd, 2018). It is a condition that is not always adverse. A certain degree of stress is sometime may prove good. It can motivate someone to get something done or help one to react quickly to potentially dangerous situations. But Beyond optimal point too much stress can be hazardous as it could breakdown a person's mental, physical, emotional & social well-being. Brian Luke Seaward (2006) described four main types of stress which are as follows:

- ✚ **Eustress:** This kind of stress, which is regarded as beneficial stress, can emerge in any scenario that an individual finds inspiring or encouraging. It provide motivation to an individual performing and drawing out best of his potential (Pfeiffer, 2001). This kind of stress is enjoyable and does not pose any threat.
- ✚ **Distress:** This kind of stress is the actual stress which is not considered good. It is of two kinds: (i) **Acute Stress:** It is a short-termed stress looked intense from outside but soon disappears. (ii) **Chronic Stress:** This stress have a prolonged periods of time (eg. Hours, days, weeks, or months.). Their duration is unbearably long, yet they are not really intense.
- ✚ **Hyperstress:** This type of stress comes when a person is forced to perform above their normal capacity.
- ✚ **Hypostress:** The stress which is caused by boredom or lack of motivation.

### **FACTORS AFFECTING STRESS AT SECONDARY LEVEL**

Since stress is a natural element of life for people, it cannot be avoided. When a person interacts with his surroundings, he typically needs to deal with competition everywhere, which typically causes tension and anxiety. Secondary school pupils' stress levels are influenced by a variety of demographic parameters, including family structure, sex, and parents' monthly income. Other factors include academic factors, physical factors, social factors, and emotional factors. Additionally, the main sources of stress for sec. school students are examinations, choosing a career path, family troubles, work overload, and limited time to deliver work. Thus, a range of elements, including parents, teachers, administrators, the history of the school, and societal norms and values, are accountable for the stress experienced by students. Students frequently utilise coping mechanisms to deal with stress, such as talking to someone about the issue, exercising, and listening to music.

### **LITERATURE REVIEW**

According to research, academic performance is a measureable and observable behaviour of students over time that is accumulated through a range of tests (Kumar, et al., 2021). The internet has become into an essential resource for communication and information gathering. The proliferation of electronic dictionaries, encyclopaedias, and books has accelerated and improved accessibility to research. The internet has many positive aspects. However, extreme use of the internet is becoming a global health problem. Additionally, internet addiction has a detrimental effect on academic achievement. Hossain et al. (2018) establish a negative link between regular internet use & student scores, while one study discovered many detrimental effects on academic performance (Said, 2020). Academic performance is measured using teacher-assessed knowledge, educational goals specified by students and instructors, or over a period of time and ongoing

evaluation, according to Narad and Abdullah (2016). Each person and institution may have different exams and objectives. According to Kausar et al. (2018), successful students had moderate to high levels of stress, whereas failing students experienced mild to severe levels of stress.

## **OPERATIONAL DEFINITIONS**

### **Academic Performance**

“Academic performance refers to the level of achievement or success that a student demonstrates in their educational pursuits (Plaza, 2014). In order to assess the academic performance, the researcher had gathered data from school examination record of the respective schools”.

### **Internet Addiction**

“Internet addiction as the compulsive urge to continually use the net, whether it be to spend hours surfing the web, hang around in chat rooms or play online games (Young, 1995). Internet addiction is characterized by excessive or poorly controlled preoccupations, urges or behaviours regarding computer use and internet access that lead to impairment or distress”.

### **Academic Stress**

“Academic stress is defined as a student's psychological state resulting from continuous social and self-imposed pressure in a school environment that depletes the student's psychological reserves (Neseliler , et.al. 2017). Thus, academic stress is a mental pressure, tension or stress that comes due to the demands of school/college life”.

## **OBJECTIVES**

- 1) “To compare the academic performance between male and female sec. school students.
- 2) To compare the internet addiction between male and female sec. school students.
- 3) To compare the academic stress between male and female sec. school students.
- 4) To determine the significant relationship between academic performance and internet addiction of sec. school students.
- 5) To determine the significant relationship between academic performance and academic stress of sec. school students”.

## **HYPOTHESES**

**H<sub>01</sub>** “There is no significant difference in academic performance between male and female sec. school students.

**H<sub>02</sub>** There is no significant difference in internet addiction between male and female sec. school students.

**H<sub>03</sub>** There is no significant difference in academic stress between male and female sec. school students.

**H<sub>04</sub>** There is no significant relationship between academic performance and internet addiction of sec. school students.

**H<sub>05</sub>** There is no significant relationship between academic performance and academic stress of sec. school students”.

## **METHODOLOGY AND INVESTIGATION PROCEDURE**

### **RESEARCH METHOD:**

For the current study, the *Descriptive Survey Method* was used since it's viewed as one of the vital methods in education & it explain the present position of the research work.

### **SAMPLE**

A sample of 700 Sec. school students (345 Male & 355 Female) of 9th class was selected (by multistage random technique) from C.B.S.E. affiliated schools of Rohtak and Sonapat districts of Haryana State.

**MEASURES USED FOR DATA COLLECTION:**

For the present study following scales were administered:

- 1) **Academic Performance:** In order to assess the academic performance, the researcher had gone through the school examination record of the respective schools.
- 2) **Internet Addiction Scale** by Gulati, Kurisunkal & Bakliwal (2021).
- 3) **Scale for Assessing Academic Stress (SAAS)** by Sinha (2014).

**STATISTICAL TECHNIQUES EMPLOYED:**

Mean, SD, t-test & co-efficient of correlation (Karl Pearson) were used to determine the significant difference & significant relationship of Independent variables (Internet Addiction & Academic Stress) & Dependent variable (Academic Performance) respectively.

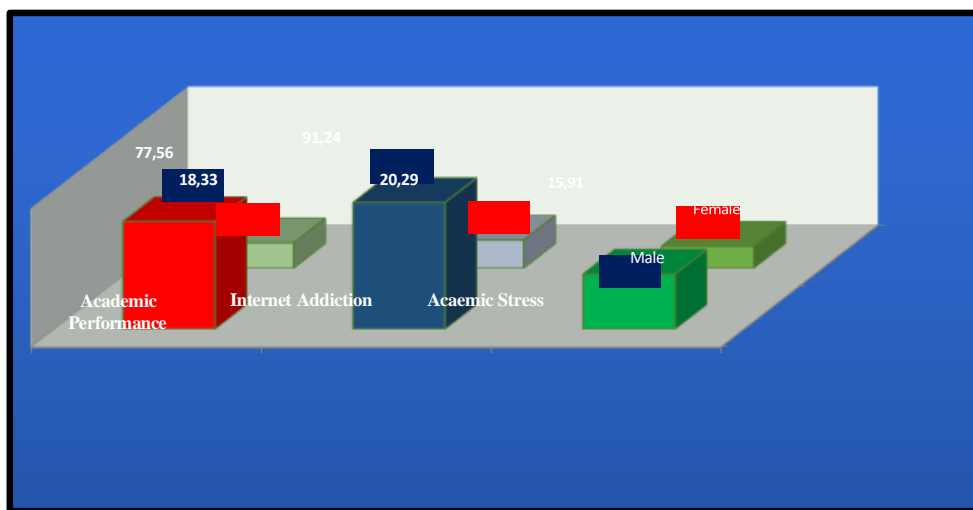
**DATA ANALYSIS & INTERPRETATION:**

“Comparison of Academic Performance, Internet Addiction & Academic Stress among Male & Female Sec. School Students”

**Table-1**

Dependent Variables	Groups	N	Means	SDs	t-value
Academic Performance	Male	345	77.56	18.33	9.36**
	Female	355	91.24	20.29	
Internet Addiction	Male	345	39.71	15.91	5.13**
	Female	355	45.87	16.10	
Academic Stress	Male	345	116.32	20.11	7.74**
	Female	355	128.56	21.89	

\*\* Significant at 0.01 level & df=698



**Fig. 1:**  
“Mean Scores for Academic Performance,

### Internet Addiction and Academic Stress of Male & Female Sec. School Students”

**O<sub>1</sub>:** “To compare the academic performance of male & female sec. school students”.

**H<sub>01</sub>** “There is no significant difference in the academic performance of male & female sec. school students”.  
 “An inspection of table-1 and fig. 1 indicated that the t-value (9.36) showed a significant difference in academic performance of male and female secondary school students at 0.01 level.” In terms of means scores, female students (91.24±20.29) have higher academic performance as compared to male students (77.56±18.335). So, the null hypothesis, **H<sub>01</sub>** is rejected. Therefore, it can be concluded that female students score better in academics than male students.

**O<sub>2</sub>:** “To compare the internet addiction among male & female sec. school students”.

**H<sub>02</sub>** “There is no significant difference in internet addiction among male & female sec. school students”.  
 The t-value (5.13) from table-1 indicates a significant difference in internet addiction among male & female sec. school students at 0.01 level. In terms of means scores, it is evident that female students (45.87±16.10) scores higher on internet addiction as compared to male students (39.71±15.91). So, the null hypothesis, **H<sub>02</sub>** is rejected. Therefore, it can be concluded that female students have more addiction towards internet than male students.

**O<sub>3</sub>:** “To compare the academic stress among male & female sec. school students”.

**H<sub>03</sub>** “There is no significant difference in the academic stress among male & female sec. school students”.  
 The t-value (7.74) from table-1 revealed a significant difference in academic stress among male & female sec. school students at 0.01 level. Therefore, it can be safely interpreted that female students (128.56±21.89) were found more academically stressed in comparison to male students (116.32±20.11). So, the null hypothesis, **H<sub>03</sub>** is rejected. Consequently, it may be said that female students are under more academic stress than their male counterparts.

**O<sub>4</sub>:** “To determine the significant relationship between academic performance and internet addiction of sec. school students”.

**H<sub>04</sub>** “There is no significant relationship between academic performance and internet addiction of secondary school students”.

**Table-2**

**“Coefficients of Correlation (r) between Academic Performance and Internet Addiction of Sec. School Students”**

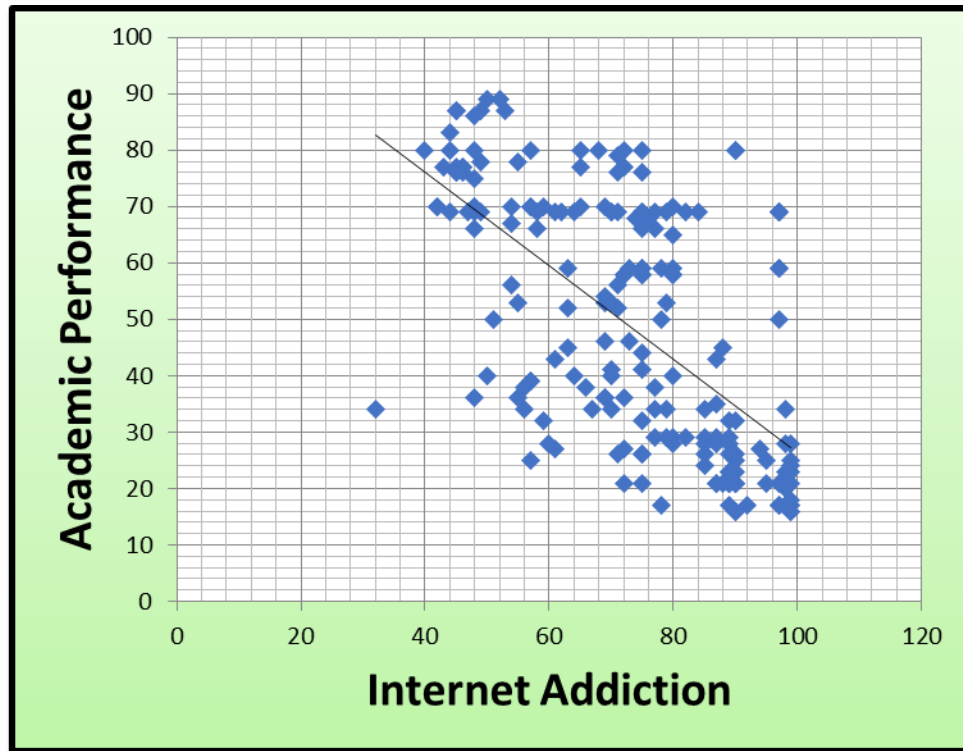
Variable	Coefficient (r)	Internet Addiction
Academic Performance	Pearson Correlation	<b>-0.592</b>
	Sig. (2-tailed)	<b>.000**</b>
	N	<b>700</b>

**\*\* Significant at 0.01 level**

It is apparent from Table-2 that the ‘r’ value (-0.592) for the relationship between academic performance & internet addiction of sec. school students is negative but significant at 0.01 level of significance. The magnitude of “r” suggests a negative correlation between sec. school pupils' academic achievement & internet addiction. Consequently, it can be concluded that higher the internet addiction lowers the academic

performance of students and vice-versa. So, the null hypothesis **H<sub>04</sub>** is rejected. Scatter plot for the relationship between academic performance & internet addiction was given below:

**Fig. 2**  
**Scatter Plot Showing Relationship btw. Academic Performance & Internet Addiction**



- O<sub>5</sub>:** “To determine the significant relationship between academic performance & academic stress of sec. school students”.
- H<sub>05</sub>** “There is no significant relationship between academic performance and academic stress of secondary school students”.

**Table-3**  
**“Coefficients of Correlation (r) between Academic Performance and Academic Stress of Secondary School Students”**

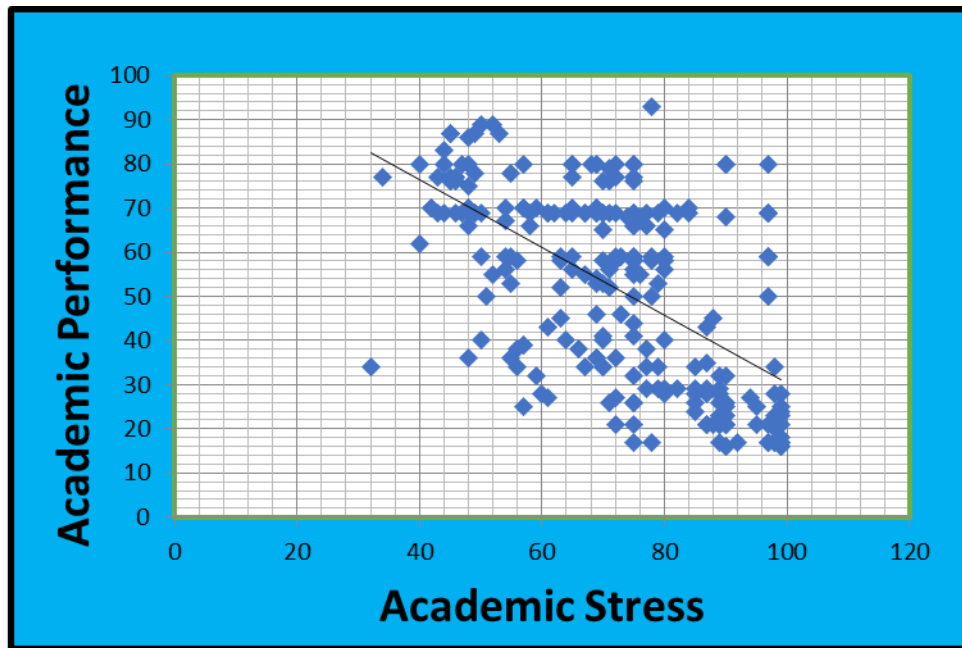
Variable	Correlation (r)	Academic Stress
Academic Performance	Pearson Correlation	<b>-0.463</b>
	Sig. (2-tailed)	<b>.000**</b>
	N	<b>700</b>

**\*\* Significant at 0.01 level**

An examination of Table-3 revealed that the 'r' value (-0.463) for the relationship between academic performance & academic stress of sec. school students is negative but significant at 0.01 level of significance. The magnitude of 'r' indicates that academic stress is negatively correlated with academic performance of secondary school students. So, it can be concluded that higher the level of academic stress among students lower their Academic Performance and vice-versa. So, the null hypothesis  $H_{05}$  is rejected. Scatter plot for the relationship between academic performance and academic stress was given below:

**Fig. 3**

**Scatter Plot Showing Relationship between Academic Performance & Academic Stress**



**DISCUSSION ON THE OBTAINED RESULTS**

From the analysis of current study, it was found that female students have higher academic performance as compared to male students. The present result was also supported with the findings of Singh and Singh (2007) who also revealed a significant difference in academic performance with respect to gender. Female students were found more internet addicted as compared to male students. Similar study was conducted by Chiu et al. (2013) on internet addiction through smart phones in students of Taiwan and found that female students were more addicted than male students. It was also found that female students experience more academic stress than male students. Similar study was conducted by Chemutai and Mulambula (2020) who revealed a significant dissimilarity in the level of academic stress between male and female students. Female students were found to have higher stress level than the male students. Dhull and Kumari (2015) also found that female subjects were found to be under more academic stress as compared to their male counterparts. Further, it was found that internet addiction is negatively correlated with academic performance of sec. school students. The present result of the study supported by Akhter (2013) who also found that internet addiction was a significantly negatively correlated with academic performance. Mukund (2023) found academic performance was significantly negatively correlated with entertainment and with Internet addiction. In the present study, academic stress was also found negatively correlated with academic performance of sec. school students. The present finding is in line with the finding of Alam and Halder (2018) who also explored negative correlation between the academic stress and academic performance of the students. Li,et.al. (2023)



showed a negative relationship between academic stress level and academic performance which means the lower the academic stress level, the higher the academic performance.

## CONCLUSIONS

- 1) It can be concluded that female students score better in academics than male students.
- 2) It was found that female students are more addiction towards internet than male students.
- 3) It can be concluded that female students experience more academic stress than male students.
- 4) It can be concluded that higher the internet addiction lowers the academic performance of students and vice-versa.
- 5) It can also be concluded that academic stress is negatively correlated with academic stress.

## EDUCATIONAL IMPLICATIONS

Major Educational Implication of this research work will be building & developing the high achievement among the students as they are the fourth coming future of our country. The present research finding will be helpful in making parents, teachers, administrators and policy-framers by making them more aware to think about ways and techniques for encouraging students to use the internet for academic purposes and establishing a better balance between internet usage and academic study is also important. Several ideas might be taken into consideration to solve the complex interaction between internet addiction and students' academic performance. To enable students to find a balance between online and offline activities, the curriculum should also incorporate the development of time management and digital literacy skills. It can also be helpful to encourage students to self-regulate their screen time and set goals for their online involvement. Finally, parents or guardians should have healthy open dialogue with their children about using technology responsibly. Stress management programmes should be arranged by school administration to reduce the fear of exam among students. Teachers should pace their work adequately in order not to rush students at the end of the term. Educational institutions should put awareness campaigns and workshops in place to inform students about the possible effects that excessive internet use may have on their academic performance.

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