

# Impact of Internet on Health & Academic Performance of School Students in India



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*Internet surfing has become an important part of student life nowadays. This research aims to examine how excessive usage of internet impact on their physical health, psychological wellbeing and social life including academic performance. The sample was selected from 200 adolescent internet users between the age group of thirteen to seventeen years studying in senior or junior secondary schools in India. The findings showed that internet affects students' sleep cycle, causing pain in various body parts and affecting their communication with parents and family. The study suggests the need to create awareness about cybercrime and cyber bullying.*

**Keywords:** Internet Exposure, Physical Health, Psychological Wellbeing, Social Life, Academic Performance

## 1. Introduction

The importance of the internet among people with access to data is significant and pervasive, influencing various aspects of daily life, work, education, communication, and entertainment. As of October 2023, there were 5.3 billion internet users worldwide, which amounted to 65.7 percent of the global population. Of this total, 4.95 billion, or 61.4 percent of the world's population, are social media users. According to IAMAI and market data analytics firm Kantar, for the first time more than half of Indians, 759 million citizens, are active internet users and access the internet at least once a month. It is expected to grow to 900 million by 2025.

The evolution of technology has become the best medium to explore the wide area of knowledge among students' community. On the other hand, it also has adverse effects on the academic performance of the students. Several students are more passionate creating attractive profile on platforms such as Facebook and Instagram, maintaining the status on media, playing on line games, chatting with friends virtually and many technology-based activities reducing direct involvement of students with books. Studies shows different results in the form of negative such as running Facebook for fun or to kill the time, to meet existing friends or to make new friends (Ellison, Steinfield, and Lampe, 2007). According to Kimberly .et. al (2009), students spend much time on participating in social networking activities, simultaneously with many students blaming the social networking sites as the reason for decreasing the grade points averages.

The social media age is a time where the number of online friends is more in comparison to the real-life friends. Adolescents are living their pseudo life through social media. It has become a pretend place for everyone. One needs to post a picture before doing anything viz. eating, sleeping, travelling, shopping, meeting, etc. According to (Jahoda, 1953) psychological health can be a constant search of satisfactions in someone's life. However, the internet is helping them to search for what they want in their life. The availability of variety of content on internet has created havoc among adolescents. On the one hand, it gives them pleasure and satisfaction to share their feelings through posting something on social media. They even feel jealous and depressed by watching other's post. It has also created a pressure among them to share something unique on their social media account. This gives rise to cyber bullying and cyber porn as well.

Furthermore, it builds a base for depression, social isolation and anxiety. Tripathi (2017) mentioned that internet addiction is correlated with many psychiatric disorders like stress, low self-esteem, impulsivity, poor sleep quality and social phobia among others. Romano et al. (2013) found that use of internet provides a negative impact on positive moods of internet addicts. This can be understood that the excessive use of internet among adolescents has more negative impact on its users than the positive ones. They have become so much involved in their virtual life that they are almost ignoring to cherish the real-life moments like family functions and social gathering. Nowadays, it is very common to see a group of friends sitting together but all are occupied with their individual mobile screen. The peer pressure forces adolescents, to actively post on social media sites whether it is their food, dress, choices, picture or any event of personal life. It influences their choices, interest and decisions.

In the present tech-savvy world, majority of the adolescents are using internet and mobile phones. The COVID-19 pandemic situation has bound the schools to take online classes for each level. This gave rise to the availability of a variety of e-learning websites and mobile applications that provide content, coaching, mock test, and guidance to the students of all levels. Students may improve their academic achievement if they use the internet sensibly for their academic purpose (Sahibi and Rusli, 2017). However, the overuse of social media platforms, mobile gaming, and binge-watching by students consume the time that could be used for their studies effectively. This negatively impacts their academic achievement scores. In this backdrop, the purpose of this study is: (a) to examine the extent of internet usage among students in India; and (ii) to analyze

the positive and negative impact of internet use on their academic performance and physical & psychological health. The paper is structured as follows. Section 2 presents a review of literature followed by research methodology in Section 3. Section 4 presents and explores the findings and results and contextualizes them with quantitative evidence collected from the field. The next section gives a brief discussion regarding the results of the study and then Section 6 ends with concluding remarks.

## 2. Literature Review

Gangwar and Suvridha (2016) discussed on the advantages and disadvantages of internet use for teenagers. The review deliberated on how teenagers can use the internet to further their education, learn new things, and find out about higher education. It did, however, also shed attention on the negative consequences of internet usage. Debbarma and Umadevi (2021) studied the correlation between self-regulation and problematic internet usage among students between the age group of 16 and 18. According to them, 82% use social media networking sites like Facebook and Instagram. They also found that 56% girls and 80% boys spent 60-90 minutes per day on social networking sites (SNSs).

Methew and Raman (2020) had a comparative study of teenagers enrolled in private schools across northern and southern Indian states. The variables studied included parenting style and the relationship of students with parents. According to Almasi, Machumu and Zhu (2017), students typically utilize their smartphones to access the internet. As a result, they enjoy 24-hour access to the internet. They also use social media for talking, interacting with others, watching movies, and listening to music in addition to using it for educational objectives. The study emphasized the importance of the internet for education in schools and the need for its efficient use. Karacic and Oreskovic (2017) conducted research on teenage internet addiction in Finland, Poland, and Croatia to determine the reasons why teenagers use internet. Results showed that among teenagers, internet addiction rises with age. The findings also showed that girls were utilizing it more than boys were for academic objectives. Amponsah et al., (2022) explored the usage of the internet and its impact on the academic performance of Senior High School (SHS) students in Ghana. The result revealed that internet access influences academic standards among students, as those with internet access have shown a higher improvement in academic performance than those without.

### 2.1 Effects on Psychological Health

Cabrera et al. (2019) carried out a study on problematic internet use (PIU) among college students and FoMO (fear of missing out) as its predictor. The study highlighted that the overuse of internet may become problematic for the users. The main objective of this study was to assess, examine and find correlation between the levels of fear of missing out, time spent on social networking, and problematic internet usage among the college students. Developed research tools viz. Young's Internet Addiction Test (IAT) Questionnaire, Przybylsk's FoMO scale, and Olufadi's Social Networking Time Use Scale (SONTUS) were used to collect the data. The analysis showed a correlation between Problematic Internet Use with FoMO and use of SNS among the students. Feng and Zhong (2019) explored the relationship between the adolescent's stress and internet addiction in China. The investigation was carried out to understand the impact of stress, social anxiety and social class on internet addiction among the adolescents studying in middle school. A significant positive correlation was also found between the stress and social anxiety and internet addiction. However, it showed negative correlation with the social class. The study concluded that the adolescents from varied social class have varied kinds of anxiety when they feel stress and this influences their internet preferences.

Maheshwari and Sharma (2018) considered Internet addiction as a growing concern in India. The study described various risk factors that could be associated with internet addiction. The risk factors could include social factors like introversion, low parental involvement, ill peer or parent relationship, loneliness; psychological factors such as depression, anxiety and social phobia as well. McLeod et al. (2017) agreed that social gaming mobile applications aids in maintaining mental health among the users. Zhitomirsky-Geffet and Blau (2016) studies predictive factors of addictive behaviour in smartphone usage among 216 Israeli. It found the Generation Z were connecting emotional gain from their smartphone usage. This finding highlights the respondents' enjoyment and relief from negative psychological state. Singh and Barmola (2015) studied internet addiction, mental health and academic performance among school going adolescents. The result of the study showed significant effect of internet addiction on both academic performance of adolescents and their mental health. Those who had severe internet addiction showed negative effect on their academic performance and their mental health in comparison to those who had moderate internet usage. The reason for internet addiction could be the easy accessibility of internet, and easy medium to express feelings and emotions. The study concluded that if the internet is used moderately by adolescents, it can be beneficial for their academics and its severe addiction may cause harmful effects. Sharahi et al. (2014) found a significant association between Internet reliance and educational downfall, leisure time, communicating with others, tendency to aggression, social isolation, and life satisfaction. Vaghela (2014) mentioned that internet addiction increases the anxiety among adolescents.

Bozkurt et al. (2013) found occurrence of psychiatric morbidity, anxiety and mood disorder among internet addicted young children. Chih et al. (2013) also found an association between internet addiction and increased depression and hostility among adolescents, especially girls. Psychological issues ranging from mood swings to altered behavior, withdrawn attitude and loneliness have been reported by (Singh, 2013) to be the main effect of using the internet mainly for social networking and mailing. Cash et al. (2012) mentioned that internet addiction could be a predator for adolescents. The excessive use of it affects their quality of life negatively and ultimately leaves them lonely. Ligang et al. (2012) mentioned that those adolescents who were spending more time on internet for their emotional release or using it as their mode of expression indicates poor

lifestyle habits among them, whereas those who were using it positive purposes like gaining knowledge indicates healthy lifestyle.

## 2.2 Effects on Academic Performance

Borgohain and Gohain (2021) conducted research on the effects of social media on students' academic achievement. The study demonstrated both beneficial and detrimental effects of social media on the chosen students' academic performance. It was discovered that certain respondents used Facebook and WhatsApp more frequently than others. Additionally, the results indicated that over 50% of them thought studying from social media networking sites was more engaging than learning in a classroom. The students had identified the benefits of studying via social media networking sites. However, the findings also showed that if the student use it more for their entertainment purpose, then they might lose track of what they were studying in their class and hence shows a negative sign too.

Soegoto and Tjokroadiponto (2018) conducted research to understand the relationship between internet on student's academic performance and their social life in Indonesia. Yebowaah (2018) carried out research to study the internet usage and its effects on high school students in Ghana. The findings revealed positive influence of internet usage on academic performance of students. Those who had access of internet on their mobile phone scored high in comparison to others. Siraj et al. (2015) showed that high internet usage leads to better academic performance because students get to expose with the informative world. It argued that internet addiction could be a good protector for student's social skills and academic achievement.

Ehtesham (2014) studied internet addiction among secondary school children and its association with their academic achievement. The study found that high use of internet had positive influence on academic achievement. Yesilyurt et al. (2014) agreed that access to a home computer and internet connection enhances the student's academic performance and their self-learning skills. Sadhir, Stockburger & Omar (2016) mentioned that most of the teenagers have access to internet through their laptops or desktops or smartphone. This access allows them to use social media and mobile gaming. However, these increase chances of being cyber bullying, sexting, and other problematic internet usage that may affect their health. There is an urgent need to educate adolescents and their families about these challenges and guide them to promote age appropriate and healthy internet behavior.

## 3. Methodology

In order to achieve the study goal, a descriptive cross-sectional survey research design was used to assess the relationship between students' internet use, physical & psychological health and academic performance of students. Therefore, the purpose of the survey was to investigate access to internet and how it's affects students' health academic performance. The data was collected using convenient sampling technique from 400 students between the age group of 15 to 17 years studying in Standard IX to XII across the city of Indore.

In total, 20 schools were identified and from each school 20 students were surveyed. A structured questionnaire was developed for the data collection which included questions related to the profile of the respondents, their attitude towards internet, and their frequency of internet usage, among others. In order to collect the data related to impact of internet on academic performance and physical & psychological health, 5-point Likert scale was used. The time period of data collection was between August to October 2023.

The internet usage was defined on the basis of calculating its pattern of use. The variables considered for assessing the internet usage are: money spent on internet; time spent on internet; number of personal gadgets and the number of social media platform the adolescent use. The impact of internet among the adolescents was categorized into three categories viz. high impact, moderate impact and low impact on their physical health, psychological health, social life and academic performance. Data on background information from spreadsheets was transferred to the Statistical Package for Social Sciences (SPSS) and analyzed using frequencies, percentages, means, and standard deviation. The means contributed to the analyses of the t-test to show differences.

## 4. Results and Findings

This section deals with various results and findings obtained out of the survey process. The results are divided among various parameters of impact of internet usage, and its consequences on academic performance and health. The research shows the context of the respondents' significant attributes.

### 4.1 Positive Impact of Internet on Academic Performance

Approximately 73% of the respondents agreed that internet is:

- making them more sustainable and advanced;
- improving their academic performance;
- helping them in gaining more knowledge;
- improving their learning capability; and,
- providing them information platform.

#### 4.2 Positive Impact of Internet on Physical Health

Majority of the students agreed that internet helped in:

- getting health-related information easily available (66%);
- staying fit with updated information and fitness motoring mobile application (60.5%);
- using internet as an easy way to attain fitness.

#### 4.3 The Negative Impact of Internet on Academic Performance

Higher percentage of the respondents agreed that internet

- distracts focus from the study (82%);
- increases the dependency on the internet for solving every question (71%);
- reduces reading habits (53%);
- diminishes the self-study capability (49.2%);
- wastes time in studies (65%).

#### 4.4 The Negative impact of the internet on physical health

Higher percentage of the respondents agreed that negative impact of internet could be:

- Dryness and pain in eyes (55.4%);
- Backache (66.2%);
- Headache and irritation (53%);
- Obesity (42%).

#### 4.5 Changes experienced in life after using various websites

The study also threw light upon the changes that students experienced after using various websites through internet. The students agreed that:

- Academic Sites Enhance their Studies (70.8%);
- Their Academic Performance Improved in School (60%);
- Helped in Exploring New Things (53.8%).

#### 4.6 Time Spent on Internet Daily by the Students

Table 1 Shows the Time Spent by students on Various Websites.

**Table 1** Time Spent on Internet Daily

Time Spent	Percentage (%)
1-2 hrs	17.25
2-3 hrs	23.50
3-4 hrs	38.50
More than 4 hours	20.75

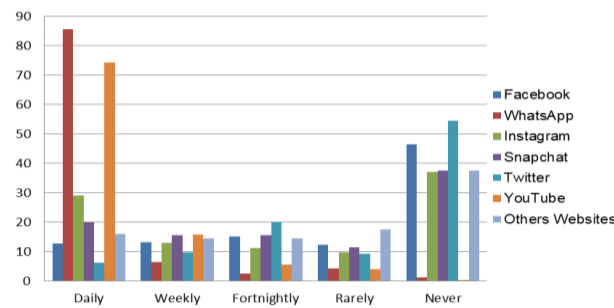
Source: Survey Data

Mathew and Raman (2020) also mentioned that north India adolescents spend at least 1-2 hours daily on internet. Another research on Indian adolescents found that the average time spent by them in a week was 6 hours that means approximately one hour a day (Lakshmana et al. 2017). A report by e-Marketer suggests that after pandemic, the average time spent on mobile phones by Indians had increased. The Indians spent at least 1.39 hours on digital medium viz. mobile phone, laptops and desktops (Flood, 2020). However, this study observed that around 39% of the students in Indore spend 3 to 4 hours on internet daily. One reason may be the addiction they have developed in using the mobile phone during COVID-19 pandemic.

#### 4.7 Social Media Platform used by the Senior Secondary Students

The frequency with which senior secondary students use social media is depicted in Figure 1. It demonstrates that a significant portion of the respondents uses WhatsApp (85.50%) and YouTube (74.25%) on a daily basis. While YouTube is used for entertainment, education, music listening, learning new skills, and other purposes, WhatsApp is primarily used for communication—whether it be through voice, video, or messages—and sharing information as well as resources like photographs, audio, video, text documents, or certain URLs. These are suitable platforms for virtual learning. It would be reasonable to presume that teenagers must be interacting with peers and teachers on both of these platforms, and that they are also sharing educational resources on YouTube and WhatsApp. However, a little less than thirty percent (29%) were using Instagram and a fifth (20%) of them were using Snapchat daily. These platforms are solely for communication and entertainment.

The adolescents use social media for making new friends (Vijayalakshmi et al. 2014), chatting with their friends (Almasi and Zhu, 2017) and they try to avoid social activities outside the virtual world (Singh, 2019). Undiyaundeye (2014) highlighted the positive side of using social media and suggested that if the adolescents use it wisely it may help in finishing their numeracy skills and enhance creativity.



**Figure 1** Students according to the Social Media Platform Used  
Source: Survey Data

**4.8 Intensity Indices for using Internet for Various Purposes**

Table 2 shows the intensity indices for using internet by the students. The range of the intensity indices calculated was between 2.83 and 1.58. This indicates high to low usage. The high usage was found for attending online classes (2.83). Moderate usage was observed for preparing assignment (2.48), gaining general knowledge (2.41), getting news (2.35), learning new skill (2.35), entertainment (2.21), watching sports (1.69), getting updated with fashion (1.67), learning cooking skills (1.66) and shopping (1.61). These intensity indices scores suggest that the senior secondary students were using internet for learning and also for getting update. The respondents had low usage of internet for playing games and other purposes (1.58 and 1.58 respectively).

**Table 2** Intensity Indices for Internet Usage

Purposes	Intensity Indices
Taking part in Online Classes	2.83
Preparing Assignment	2.48
Gaining General Knowledge	2.41
Being updated with News	2.35
Learning New Skill	2.35
Entertainment	2.21
Watching Sports	1.69
Being updated with Fashion	1.67
Learning how to cook	1.66
Shopping	1.61
Playing Games	1.58

Source: Survey Data

Singh (2019) found that Indian adolescents mainly use internet for chatting, e-learning, socializing and surfing other online contents. Contrary to the present findings, other Indian researchers found that adolescents use internet mostly for social networking and playing games (Puspita and Rohedi 2018).

**4.9 Preferred Time for using Internet**

Nearly half of the senior secondary students preferred using internet during morning hours (49%) whereas, a little less than one third of them preferred using internet in the afternoon time of the day (30%). It indicates that the selected adolescents who are studying in school preferred using internet according to their need. Furthermore, it showed that less than one fifth of them preferred using internet in their free time (17.75%) and very few of them preferred using it during late in the night (2%) and in the evening time (1.25%). However, Singh (2019) mentioned that Indian adolescents mainly use internet specifically for social media during late night.

**Table 3** Time Preferred by Students for using Internet

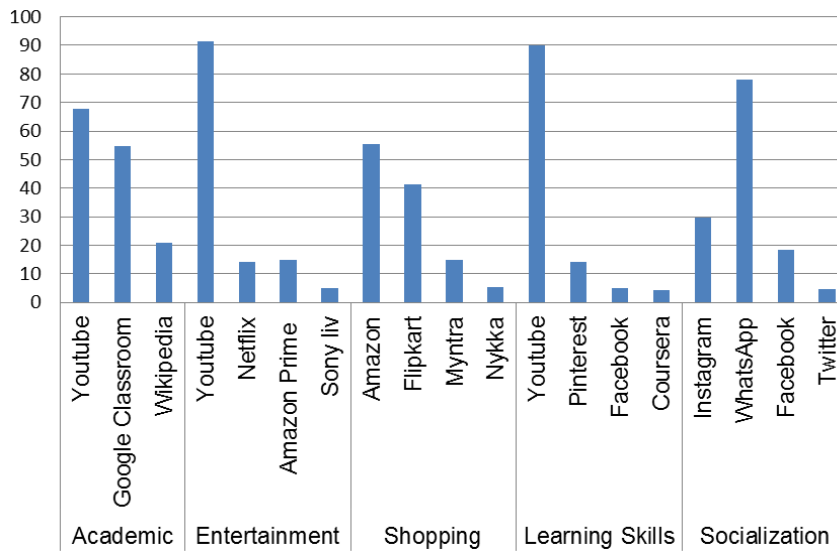
Preferred Time	Percentage (%)
Morning time	49.00
Afternoon time	30.00
In any free time	17.75
Late in the night	2.00

Source: Survey Data

**4.10 Website Used for Various Purposes**

The students use different websites for academic purposes, entertainment, shopping, learning skills and socialization. Figure 2 shows that higher percentage of the students use YouTube (67.75%) and Google classroom (54.75%) for their academic purposes whereas, one fifth of them also rely on Wikipedia (20.75%) for the same. The websites used for entertainment purposes are majorly, YouTube (91.50%), Netflix (14.25%), Amazon Prime (14.75%) and Sony Liv (5%). The figure also

depicts that the students use Amazon (55.50%), Flipkart (41.60%), Myntra (15%) and Nykka (5.25%) for shopping purposes.



**Figure 2** Distribution of Students According to the Websites used  
Source: Survey Data

The respondents are also using internet for learning new skills. It is observed that that a significant proportion of the students are using YouTube (90%) for learning new skills. YouTube is a website where one can find numerous videos on different topics whether it is for their education or entertainment or information or relaxation. Thus, it could be the reason that higher percentages of the senior secondary students are using it for their academics, entertainment and also for learning new skills. The respondents are also using Pinterest (14%), Facebook (5%) and Coursera (4.25%). Moreover, the data also shows that the senior secondary students are using WhatsApp (78%), Instagram (29.75%), Facebook (18.25%) and Twitter (4.50%) for socialization. WhatsApp is a convenient and one of the popular medium of communication among every age group. The online education is also conducted using WhatsApp groups. Teachers share their online class links, study material, exam sheets using WhatsApp. Thus, it became the most used social media platform among students. Baglari et. al. (2020) found that India teenagers consider WhatsApp, Facebook, Instagram and Twitter useful in their daily life. It was also noticed that the social media addicts were using Facebook more and the non-social media addicts were using WhatsApp mobile application more.

### 5. Discussions

This section discusses the major findings related to the impact of internet on physical health, psychological health, social life and academic performance among the senior secondary students.

#### 5.1 Overall Impact of Internet on Physical Health Of Students

Table 4 presents the overall impact of internet on the physical health of senior secondary students. It shows that nearly half of them have moderate impact (48.75%) of internet on their physical health. However, 30% percent of them had high impact and a little more than one fifth (21.5%) of them had low impact of internet on their physical health. The data indicates that the selected adolescents' physical health was being affected through internet.

**Table 4** Impact of Internet on Physical Health of Students

Impact on Physical Health	Percentage (%)
High	29.75
Moderate	48.75
Low	21.50

Source: Survey Data

The intensity indices for the impact of internet on the physical health of senior secondary students are presented in Table 5. The intensity indices ranged from 3.87 to 2.71 and showed high to moderate impact of internet on their physical health. It showed that the internet had high impact on maintaining the zeal among the students to stay fit (3.87). The impact of internet was moderate for following fitness expert to maintain fitness (3.54) also for reading nutrition related articles to stay updated with healthy diet (3.36). Another healthy habit that the students had agreed to have moderate impact of internet was "Count steps using fitness app on mobile" (3.25). This shows that internet was helping the adolescents to maintain their healthy lifestyle. The students also agreed that the internet helped them moderately to learn home remedies to get rid of puberty

related issues (3.10). This suggest that the senior secondary students were using internet to learn home remedies for basic puberty related issues like pimples, mood swings, rashes on skin, hair growth on skin and so on. Moreover, the findings also showed that the internet had moderate impact on their unhealthy habits.

**Table 5 Intensity Indices for the Impact of Internet on Physical Health of Students**

Impact	Statement	I. I.
High Impact	Internet boost the zeal to stay fit	3.87
Moderate Impact	Follow fitness experts on Internet to maintain fitness.	3.54
	Read nutrition related articles on internet and consume food consciously	3.36
	Go to sleep after spending some time on Internet.	3.29
	Felt irritation in eyes while watching something on internet.	3.28
	Count steps using fitness app on mobile.	3.25
	Suffer from head ache after spending time on internet.	3.18
	Used internet to learn home remedies to get rid of puberty related skin issues	3.10
	Suffer from back ache caused by spending more time on Internet in sitting position	3.09
	Gaining weight as the virtual engagement did not allow to spend time on physical activity	2.95
	Suffer from ear related issues due to use of earphones while using the internet.	2.82
Unable to sleep well due to high internet usage	2.71	
Low impact	Statement	Nil

Source: Authors Calculation

The statements that showed moderate impact on internet are: (i) go to sleep after spending some time on Internet (3.29); and (ii) gaining weight as the virtual engagement did not allow to spend time on physical activity (2.95). This indicates that the excessive use of internet was causing unhealthy routine habits among the senior secondary students. These unhealthy habits might lead to sever physical health related issues in future. Furthermore, the students also suffered from various physical health related issues and internet had moderate impact upon them. They are: (i) irritation in eyes while watching something on internet. (3.28); headache after spending long time on internet (3.18); (iii) backache caused by spending more time on internet in sitting position (3.09); and, (iv) ear related issues due to use of earphones while using the internet (2.82). These findings show that the internet is affecting the physical health of the senior secondary students. The results of statistical analysis are summarized here:

- Internet has similar impact on physical health of senior secondary students irrespective of their age, number of family members, type of family and their internet usage. Thus, the hypotheses stating that there will be significant differences in the impact of internet on physical health students in relation with their age, number of family members, type of family and their internet usage are rejected.
- No significant differences are observed in the impact of internet on physical health of students in relation with their stream of study (viz. Science, Commerce and Arts), parent's education, parent's occupation, and number of siblings. Thus, the hypotheses stating that there will be significant differences in the impact of internet on physical health of the senior secondary students in relation with their stream of study, parent's education, parent's occupation, and number of siblings are also rejected.
- Significant differences are observed in terms internet usage and size of family. The students who are living in the nuclear family with 4 or less family members have significantly higher impact of internet compared to those who are living with a family size between 5-7 members and large family size with more than 7 members.
- The students have significant differences in the impact of internet on their physical health in relation with their place of living. Those who were living in urban areas has higher impact of the same in comparison to those who lived in rural areas. The possible reason could be the difference in their internet usage. The present findings also showed that the urban adolescents were using internet more in comparison to the rural adolescents. Therefore, the hypothesis stating that there will be no significant differences in the impact of internet on physical health of the senior secondary students in relation with their place of living is rejected.
- The hypothesis stating that there will be no significant differences in the impact of internet on physical health of the senior secondary students in relation with their gender and class was accepted.

Hence, the present finding conclude that internet has a mixed impact on physical health of the senior secondary students.

## 5.2 Overall Impact of Internet on Psychological Health of Students

A little less than 40% of the students has high impact of internet on their psychological health (38%). However, more than 40% of them had moderate impact on the same (41.50%) and one-fifth of them showed low impact on of internet on their psychological health (20.50%). This highlights that majority of the students had high to moderate impact of internet on their psychological health. This is an alarming finding that indicates the damaging effect of internet on adolescents and internet addiction among them. Cabrera et.al. (2019) also found problematic internet usage among the adolescents who were using social networking sites. This highlights the role of social networking sites in creating psychological impact among the adolescents. Feng and Zhong (2019) highlighted the positive correlation between the stress, social anxiety and internet addiction.

**Table 6** *Impact of Internet on Psychological Health of Students*

Impact on Psychological Health	Percentage (%)
High	38.0
Moderate	41.5
Low	20.5

Source: Survey Data

### 5.3 Overall Impact of Internet on Academic Performance of Students

Table 7 indicates there has been high impact of internet on academic performance of majority of the students (60.75%). Furthermore, more than one-third of the senior secondary students have moderate impact of internet (36.75%) on their academic performance and very few of them had low impact (2.50%) of the same on their academic performance. This data indicates that internet usage was affecting their academic performance.

**Table 7** *Impact of Internet on Academic Performance of Students*

Impact on Academic Performance	Percentage (%)
High	60.75
Moderate	36.75
Low	2.50

Source: Survey Data

Table 8 shows the intensity indices for the impact of internet on the academic performance of the senior secondary students. It highlights that the internet had high to moderate impact on their academic performance. The intensity index ranged between 4.26-3.15.

**Table 8** *Intensity Indices for the Impact of Internet on Academic Performance*

Impact	Statement	I. I.
High Impact	Use internet to gather reference material	4.26
	Online classes are not as good as offline classes	4.16
	Internet helps in gaining information regarding the institutes for higher education	4.14
	Internet helps in improving vocabulary.	4.08
	Online classes help in learning on own pace.	3.98
	Use of Internet is essential for studies.	3.97
	Combination of text books and online available reading materials helps in scoring high exams	3.92
	Use of mobile learning apps enhances the knowledge	3.74
Moderate Impact	Internet distracts focus for studies.	3.40
	Internet waste the time that can be utilized for studies.	3.35
	E-reading materials are more preferable than text books.	3.17
Low impact	Internet is not preferable for studies as it may contain false information as well.	3.15
Low impact	Statement	Nil

Source: Authors Calculation

The highest intensity index was observed for using internet to gather reference material (4.26) and the lowest was observed for the statement "internet is not preferable for studies as it may contain the false information also" (3.15). The analysis indicates that the senior secondary students are using internet for their studies and consider internet as an important resource for their studies and higher education. The students agreed that internet showed moderate impact on their studies as it distracts their focus from their studies (3.40) and waste their time (3.35). They also agreed moderately that internet is not preferable for study as it may contain false information (3.15). This finding indicates that they are aware of the fact that false information can be shared through internet and one need to verify it before acting upon. However, the students also agreed that e-reading materials are more preferable than text books (3.17). The results of statistical analysis are summarized here:

- The impact of internet on the academic performance differed on the basis of the student's parents' education, father's occupation and their internet usage. Those who have highly educated parents are using internet more for their studies and using various e-resources for their academics. However, those who have illiterate parents the intensity of internet usage is less for their academic purposes. Thus, the hypothesis stating that there will be no significant differences in the impact of internet on academic performance of the senior secondary students in relation with their parent's education, father's occupation and their internet usage was rejected.
- No significant differences are found in the impact of internet on academic performance of the senior secondary students in relation with their age, stream of study, mother's occupation, type of family, size of family and number of siblings. Therefore, all the null hypothesis are accepted.
- The present findings also observed that senior secondary students are using internet to gather reference material related to their studies. They use numerous websites for their studies. The over use of internet might affect the academic



performance negatively. It might distract the students from their studies. However, the sensible and optimum internet usage might also help in enhancing the academic performance of the students.

- Significant difference existed in the impact of internet on the academic performance among the senior secondary students in relation with their gender. This means the boys (3.84) have different impact of internet in comparison to the girls (3.70). The mean score of boy's students is high showing higher impact in comparison to the females. Thus, the hypothesis stating that there will be no significant differences in the impact of internet on academic performance of the senior secondary students in relation with their gender is rejected.
- No significant differences are found in the impact of internet on the academic performance in relation with class of study and place of living. Therefore, the hypotheses stating that there will be no significant differences in the impact of internet on academic performance of the senior secondary students in relation with their class of study and place of living was accepted.

## 6. Conclusions

The effects of internet on the students' social lives, psychological well-being, and physical health are moderate. According to the results, accessing the internet disrupted their sleep patterns, produced pain in different bodily areas, and affected how well they interacted with their parents and relatives. Their psychological well-being seems to be somewhat impacted by the internet. However, among senior secondary students, the internet had a significant impact on their academic achievement. Age, parental education level, place of residence, and internet usage are the common factors that demonstrated a strong impact of the internet among them. The results of this study shed insight on the factors that influence senior secondary students' use of the internet. Nevertheless, analyzing the relationship between the influence of the internet and certain variables using the current data is challenging. It provided a more comprehensive picture of how upper secondary school pupils are utilizing the internet. It emphasized how they used the internet for particular things, like leisure and education.

Using a smartphone for more than three hours a day is most commonly associated with the following activities: instant messaging (38%), social media use (35%), music streaming (24%), and web browsing (20%). The least time-consuming activities (less than five minutes each day) include sending and receiving SMS texts (51%), watching movies (43%), reading and composing e-mails (38%), and making phone calls (32%). The internet is not only making culture more easily and swiftly accessible to a wider audience, but it is also fostering the emergence of new artistic mediums and the dissemination of knowledge. One potential avenue for future research could be conducting a comparative analysis of the primary, secondary, and upper secondary education levels across various educational institutions.

## 7. References

1. Almasi, M, Machumu H. and Zhu, C. (2017) Internet Use Among Secondary Schools Students and Its Effects on Their Learning. *INTED2017 Proc.*; 1:2379–90, March.
2. Baglari et. al. (2020) Pattern of social media use among youth: implication for social media literacy. *Mental Health and Addiction Research*, 2020. ISSN: 2398-5380.
3. Borgohain M, Borpatra Gohain A. (2021) Impact of Social Media in The Student's Academic Performance: An Analysis of The State Universities of Assam. *Eur J Mol Clin Med.* 7(10): 2597–606.
4. Bozkurt H, Coskum, M. and Ayaydin H. (2013) Prevalence and Patterns of Psychiatric disorders on referred adolescents with internet addiction, *psychiatry clinical neuro science.* 5: 3529.
5. Cabrera A.G., Andal Bernard A. Andal, Clarissa F. Delariarte, Martin V. Kallarackal, and Gil Jeff S. (2019) Tanganco Fear of Missing Out and Social Networking Site Usage: Predictors of Problematic Internet Use among College Students. *Asia Pacific Journal of Academic Research in Social Sciences.* 4, November.
6. Chih, H. et al. (2013) The exacerbation of depression, hostility, and social anxiety in the course of Internet addiction among adolescents: A prospective study.
7. Debbarma, R. and Umadevi, G. (2021) Self-Regulation among Young Adolescents Towards Internet Addiction. *Indian J Health Wellbeing.* 100-105. Available from: <http://www.i-scholar.in/index.php/ijhw/article/view/209000>
8. Ehtesham, A. (2014) Internet addiction among secondary school children and its relation with their academic achievements. *Indian J Res.* 3(12): 72-4.
9. Feng, Y. and Zhong, Q. (2019) The Relationship Between Adolescents Stress and Internet Addiction: A Mediated-Moderation Model. 10, *Frontiers in Psychology.*
10. Flood, E. C. (2020) India Time Spent with Media 2020 - Insider Intelligence Trends, Forecasts & Statistics. Retrieved from <https://www.emarketer.com/content/india-time-spent-with-media-2020>.
11. Jahoda, M. (1953) The meaning of psychological health. *Social Casework.* 34: 349–354.
12. Karacic, S. and Oreskovic, S. (2017) Internet addiction through the phase of adolescence: A questionnaire study. *JMIR Mental Health,* 4.
13. Lakshmana, Kasi S, Rehmatulla M. (2017) Internet use among adolescents: Risk-taking behavior, parental supervision, and implications for safety. *Indian J Soc Psychiatry,* 33(4): 297.
14. Ligang W., Jing L., Wenbin G, Jie K. (2012) The effect of Internet use on adolescents' lifestyles: A national survey, *Computers in Human Behavior.* 28 (6): 2007-2013.

15. Maheshwari, S. K. and Sharma, P. (2018) Internet Addiction: A Growing Concern in India. *IndianJ Psychiatr Nurs.* 15(1): 61.
16. Mathew, P. and Raman, K. (2020) Prevalence of problematic internet use and internet usage pattern among adolescents. *Indian J Psy Nsg.* 17:39–50.
17. McLeod RD, Friesen MR, Edgerton JD, Fries CJ. (2017) Mobile Apps for Mental Health: Overview and a Social Gaming Framework. *Int J Eng Res Dev.* 13(2):18–30.
18. Puspita and Rohedi. D. (2018) *IOP Conf. Ser.: Mater. Sci. Eng.* 306 012106. 2018.
19. Romano, M., Osborne, L. A., Truzoli, R., and Reed, P. (2013) Differential psychological impact of internet exposure on Internet addicts. 8(2). Available from [http:// dx.doi.org/10.1371/journal.pone.0055162](http://dx.doi.org/10.1371/journal.pone.0055162)
20. Sharahi et al. (2013) A Survey of the Amount of Internet Usage among High School Students of Khafr County and its Impacts on Students. 4th World Conference on Psychology, Counseling and Guidance WCPCG-2013. *Procedia-Social and BehavioralSciences* 610-616. Available online at [www.sciencedirect.com](http://www.sciencedirect.com).
21. Singh, J. (2020) Impact of Social Media on Indian Youth with Special Reference to Covid-19. *Int.J. of Innovative Tech. and Exploring Engg. (IJITEE).* 9(9): 493-496.
22. Singh, N and K. C. Barmola. (2015) Internet Addiction, Mental Health and Academic Performance of School Students/Adolescents. *Int J Indian Psychol.* 2(3).
23. Singh V. (2019) Impact of Social Media on Social Life of Teenagers in India: a Case Study. *J Acad Perspect Soc Stud.* (1):13–24.
24. Siraj, H. et al. (2015) Internet usage and academic Performance: A study in a Malaysian public university, Japan health sciences university and Japan International cultural exchange foundation. *International Medical Journal.* 22(2): 83-86.
25. Soegoto, E. S. and Tjokroadiponto, S. (2018) Effect of Internet on Student's Academic Performance and Social Life. 407, *IOP Conference Series: Materials Science and Engineering.*
26. Tripathi, A. (2017) Impact of Internet Addiction on Mental Health: An Integrative Therapy Is Needed. *Integr Med Int.* 2017; 4:215-222.
27. Undiyaundeye F. (2014) Impact of social media on children, adolescents, and families. *Glob J Interdisciplinary Soc Sci.* 3(2):1-4.
28. Vaghela, K. L. (2014) A psychological study of anxiety between internet addicts and non-addict's adolescents of urban and rural area. *Int. J of multidisciplinary Re. and Dev.* 1(7):314-316.
29. Vijayalakshmi et al. (2014). Social networking sites and Indian teenagers. *Covenant journal of education.* 2(1): 21-39.
30. Yebowaah, F. A. (2018) Internet use and its effect on senior high school students in WaMunicipality of Ghana. *Libr Philos Pract.* May.
31. Yesilyurt, E et al. (2014) The effect of technological devices on student's academic success: Evidence from Denizli. *J of Int. and Application Management.* 5(1):39-47.
32. Zhitomirsky-Geffet M, Blau M. (2016) Cross-generational analysis of predictive factors of addictive behavior in smartphone usage. *Comput Human Behaviour.* 64:682-93.