

# A SURVEY ON SOCIAL NETWORKING AND AWARENESS ABOUT RELATED CYBER THREATS AMONG YOUTH IN GOVERNMENT INSTITUTIONS OF INDIA AND AN ATTEMPT TO EDUCATE THEM

D A Prathima Mathias<sup>1</sup>, Suma B<sup>2</sup>

<sup>1</sup>Assistant Professor, Department of Chemistry, I.D.S.G. Government College, Chikkamagaluru- 577102, Karnataka, India

<sup>2</sup>Assistant Professor, Department of Library Science, I.D.S.G. Government College, Chikkamagaluru- 577102, Karnataka, India.

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**Abstract** - Renaissance in communication has occurred with rise in concept of internet. Internet offers easy access to information, its retention and reproduction features at finger tips. The phenomenal growth in Information and Technology has led to its extensive usage among children, adolescents, youth, adults and aged. Smart phones at low cost with still lower data plans have made digitization of India a reality. Internet banking, online education, online shopping, matrimonial sites etc. are few advantages of digitization. In India the highly populated sector belongs to youth who are the main internet users. In this present study a survey using questionnaires adopting random selection method was performed. Its main intention was to study social networking abilities and cybercrime awareness among our college students who are aged between 19-24 years. Analysis showed that 23.1% of our major consumers of internet (youth of our college) use it only for social networking, 9.33% have never used education related websites, 77.5% students have social media account with 20% of them using it since more than 2 years. 40% of them have more friends online than in real life, for 34.1% of them social media is the only time pass and most of them between 7 to 9 PM. However 70% of them agree that it affects their studies. It is alarming that 75% of students are unaware of cybercrimes, but, 90% of them wanted to know about it. Government colleges in Karnataka provide free laptops for students belonging to Scheduled caste and Scheduled tribes and free internet facilities in library and college campus for all students. Moreover 95% of students have internet on their mobiles, hence providing them necessary information on cyber safety was our first priority which was achieved by instruction through seminar.

**Key Words:** Survey, Digitization, Youth, Social media, Seminar

## 1. INTRODUCTION

Advances in Information Technology have has shrunk the globe and made every information easily available with just a swipe. Smart phones with touch screen facilities provide audio-visual effects and please the senses. A call from Sri. Narendra Modi for digitization of India has made internet and online transactions a necessary commodity. Be it online

purchases, bill payments, reservation bookings for travel and entertainment, bank transactions etc. all have reduced the burden of long ques in our highly populated country. The fancy world displayed in mobiles is so attractive that our younger generation prefers socializing over phone more convenient and comfortable than in reality. Free time of youth only leads to mobile based interactions. They are all the while stuck in social networking. A social networking site is an online platform that allows users to create public profile to interact with others on that particular web site. In such platforms an unending friend list who are long lost along with new ones get on added by the user. Our present generation is aware of utilizing these platforms but is uneducated about its darker sides. Cybercrime by hackers and social engineers is logarithmically increasing. Innocent youth are honey trapped not only in India but across the world. It is a well-known fact that computing in education has helped in conveying abstract ideas to students more conveniently. Hence, Government of Karnataka has brought to affect various student benefitting schemes under which edusat, infibnet facility in library, online browsing facility in colleges and free lap tops for Scheduled caste and tribes are important. It is our primordial responsibility as a part of education system to see that these facilities are effectively and safely utilized. There is no syllabus of the university that educated students about various types of cybercrime, different cyber security options and cyber safety. The present study aims at understanding the level of social networking among youth of our college and analyzing their knowledge about cybercrime and related aspects. A simple survey would only lead to data collection only, hence, we have conducted a seminar covering various aspects of cybercrime to bring about effective teaching and learning.

## 2. REVIEW OF LITERATURE

Shalini Gupta et al. (2017) in their research paper suggest that internet is a world of opportunities for young people and hence associated risk management is necessary. They feel that children and adolescents need be made resilient by providing digital literacy and cyber safety skills.

Dhruv Gupta (2016) emphasizes that cybercrime and social media go hand in hand. Social Media Marketing demands its customer to reveal their location and phone numbers, this gives an easy platform for hackers to commit crime. Social Media Marketing are also responsible for violation of Intellectual Property Rights.

Anantha Krishna et al. (2017) in their paper conclude that current attacks mainly use social platforms as delivery mechanisms. Social accounts can be easily used to hack authentic credentials with every login. They not only define different types of cyber-attacks on social networks but also related issues

### 3. OBJECTIVES

- A. To know the extent of utilization of internet among them with purpose and preferences.
- B. To analyze students' knowledge about types of social media.
- C. To analyze students exposure age to social media.
- D. To analyze time at which students are online on social media.
- E. To know about widely used social media and reason behind its utilization.
- F. To study level of understanding about advantages and disadvantages of social media.
- G. To analyze the extent of knowledge on legal acts regarding cybercrime.
- H. To analyze the level of awareness about cybercrime and cyber security among students.
- I. To analyze the type of education about cybercrime needed by the students.
- J. To conduct a seminar on cybercrime with special emphasis on social media.
- K. To collect student feedback on seminar.

### 4. SIGNIFICANCE OF THE STUDY

Students are the largest consumers of data facilities. They are addicted to many social networking sites. Hence, it is a student's right to be aware of the cyber threats and its consequences. Moreover Government provides free laptop facilities to underprivileged students and internet facility to all classes of students. As faculty, it is our responsibility to ensure that these facilities are utilized safely and effectively. Having chosen a Government college for the present study enables us to understand the cosmopolitan nature of students who hail from both rural and urban background. This study was essential and will help the Government to understand the importance of incorporating cyber awareness programmes in regular curriculum of every University and for every branch of study.

### 5. METHODOLOGY

**Location of study:** Indavara Doddasiddalinge Gowdar College (IDSG) a Government college of Chikkamagaluru District, Karnataka State, India was chosen for this study. This institution offers both Post graduation and Under Graduation courses in science, commerce and arts. It is affiliated to Kuvempu University and is the only degree college in the district to offer wide options in studies to students. Student population for the academic year 2018-19 is 2500 hailing from both urban and rural background. This large population can be used as a representation for all Government college students in the state.

**Method:** Personal Information Schedule (PIS) Survey questions were framed by the authors based on various Social networking, cyber securities etc. These survey questionnaires were typed, photocopied and used.

One day seminar was conducted on "Cybercrime" – Latest trends and challenges. It's detection, investigation and conviction (Cyber legal challenges), dated 17<sup>th</sup> September 2018 at Sri. I.S. Mallegowda Auditorium, I.D.S.G. College, Chikkamagaluru 577 102, Karnataka, India. Mr. Annamalai K. IPS, DCP (South) Bangalore [Ex SP, Chikkamagaluru District] was the chief guest and resource person for the seminar. He spoke on all aspects covering the title of the seminar.

### Population and sample size

Both Under Graduate and Post Graduate students aged between 18-21 years form the population for this study. The method adopted was probability simple random sampling. Total population of the college was 2,500 hence 250 questionnaires covering various aspects of cybercrime and cyber security were distributed. And all of them were collected after completion. Only questions and corresponding answers relevant to social media are presented in this paper.

Due to space limitation of the auditorium, only 120 students of the college were registered and allowed to attend the seminar as shown in Figure-1.

### 6. ANALYSIS AND INTERPRETATION

Survey questions covering purpose of internet usage, cybercrime awareness and necessary mode of education about cyber security were framed under three main categories as mentioned below. The data obtained under various headings were analyzed, percentage calculated and pie charts plotted.

**6.1 Following key points were prepared to identify the MAIN PURPOSE OF USING INTERNET (Charts 1 – 17)**

- 6.1.1 Do you have internet on your mobile handset?
- 6.1.2 What was / is primary purpose of the usage?
- 6.1.3 Do you know about the following social networks? (Assertive answers are considered here)
- 6.1.4 Do you have social networking account? (FACEBOOK, LINKEDIN, YAHOO, GOOGLE PLUS etc.)
- 6.1.5 If you have a social networking accounts which one among these?
- 6.1.6 How long have you been using social network websites?
- 6.1.7 Why do you use social networks?
- 6.1.8 Do you have more friends on social media than you do in your real life?
- 6.1.9 How often do you access your social networking account?
- 6.1.10 At what time are you most active on social media?
- 6.1.11 Are your parents aware of your social networking activities?
- 6.1.12 Have you changed security settings for your social media accounts?
- 6.1.13 Is using online social networking useful and essential for today's life?
- 6.1.14 Do you think social networking helps you in your studies by any means?
- 6.1.15 What are the best advantages of social network?
- 6.1.16 Do you think social networking gives negative effects on your studies by any means?
- 6.1.17 What are the worst disadvantages of social network?

**6.2 LEGAL AWARENESS was assessed using key points as below. (Charts 18 -20)**

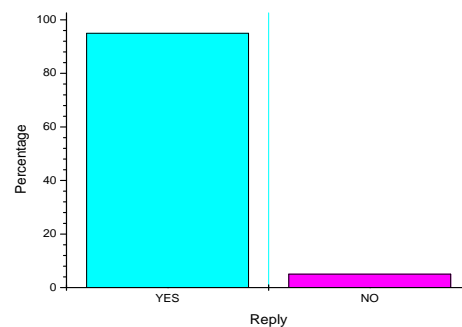
- 6.2.1 Are you aware that whatsapp group admin is legally liable if objectionable information is posted by any member of the group?
- 6.2.2 Admin is liable under which IPC (Indian Penal Court)?
- 6.2.3 How aware are you about cybercrime?

**6.3 REMEDY FOR LEGAL IGNORANCE was determined using below mentioned key points (Charts 21 a, b and c)**

- 6.3.1 Has your college helped you know about cybercrimes?
- 6.3.2 Are you interested in knowing about cybercrimes?
- 6.3.3 What type of knowledge sharing about cybercrime would you like from your college?

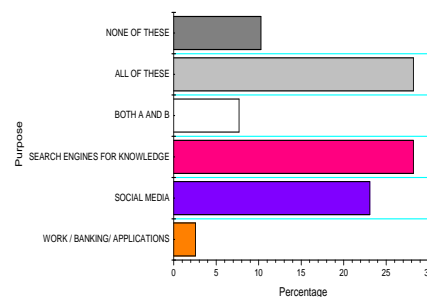
**6.1 MAIN PURPOSE OF USING INTERNET**

**6.1.1 Do you have internet on your mobile handset?**



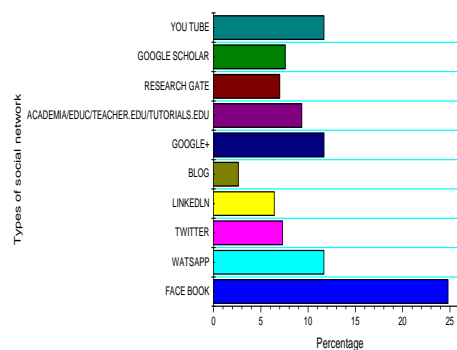
**Chart-1: Percentage of students having internet on mobile**

**6.1.2 What was / is primary purpose of the usage?**



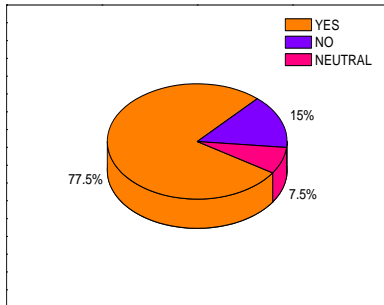
**Chart-2: Percentage of students using internet for different purposes**

**6.1.3 Do you know about the following social networks? (Assertive answers are considered here)**



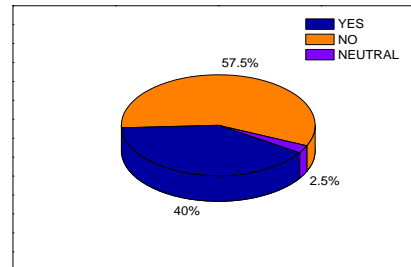
**Chart-3: Percentage of students aware of different types of social networks**

**6.1.4 Do you have social networking account?  
(FACEBOOK, LINKEDIN, YAHOO, GOOGLE PLUS)**



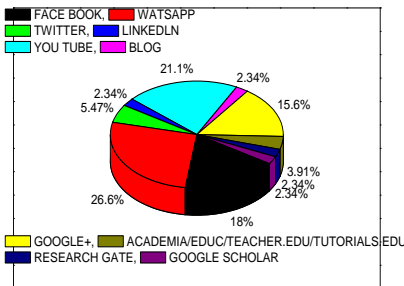
**Chart-4:**  
Percentage of students having social networking account

**6.1.8 Do you have more friends on social media than you do in your real life?**



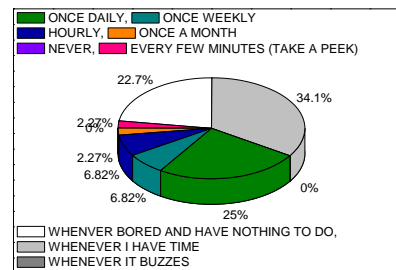
**Chart-8:**  
Percentage students having more friends online

**6.1.5 If you have a social networking accounts which one among these?**



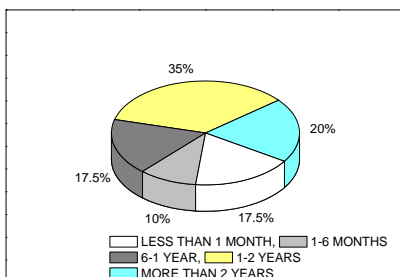
**Chart-5:**  
Percentage of students having different types of social networking accounts

**6.1.9 How often do you access your social networking account?**



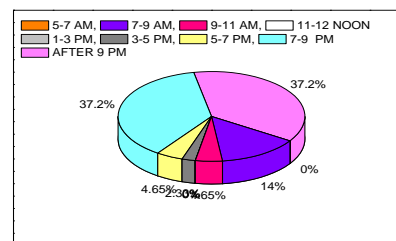
**Chart-9:** Social network accessing frequency

**6.1.6 How long have you been using social network websites?**



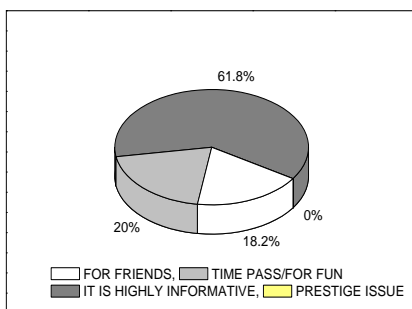
**Chart-6:**  
period since which students are using social networking account

**6.1.10 At what time are you most active on social media?**



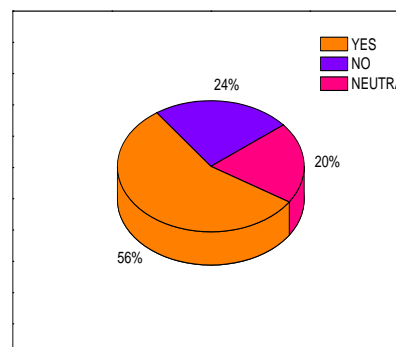
**Chart-10:**  
Social network accessing time frequency

**6.1.7 Why do you use social networks?**



**Chart-7:**  
Purpose for which students use social network

**6.1.11 Are your parents aware of your social networking activities?**



**Chart-11:**  
Parents aware of students social networking

6.1.12 Have you changed security settings for your social media accounts?

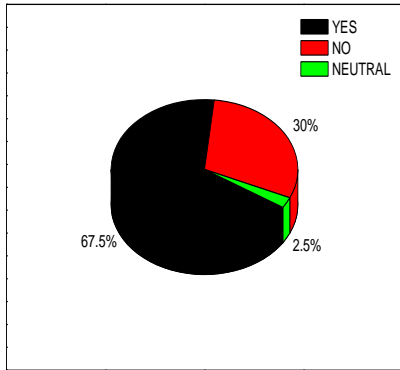


Chart-12: Percentage of students who use security settings in profiles

6.1.15 What are the best advantages of social network?

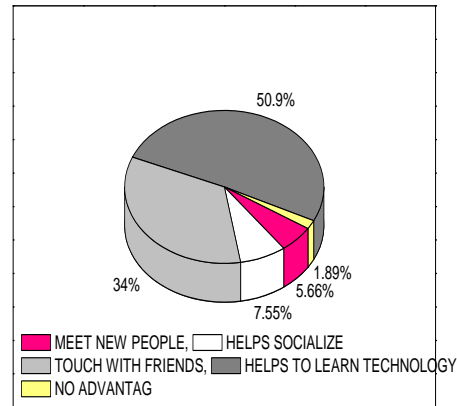


Chart-15: Advantages of social networking

6.1.13 Is using online social networking useful and essential for today's life?

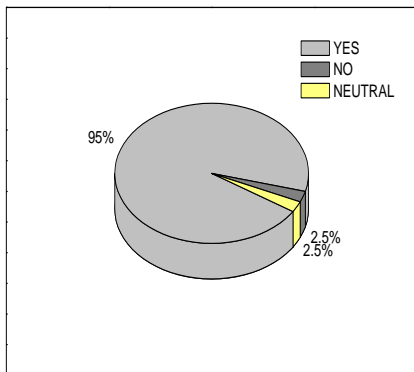


Chart-13: Percentage of students feeling social networking essential

6.1.16 Do you think social networking gives negative effects on your studies by any means?

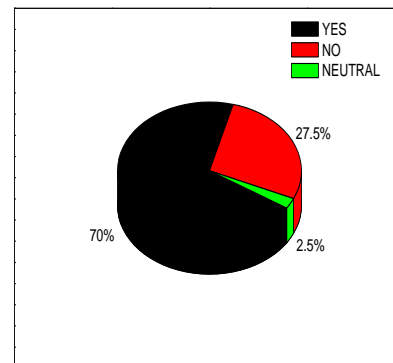


Chart-16: Social networking affecting studies

6.1.14 Do you think social networking helps you in your studies by any means?

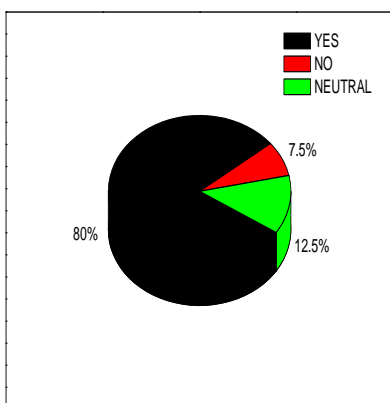


Chart-14: Percentage of students feeling social networking helps in studies

6.1.17 What are the worst disadvantages of social network?

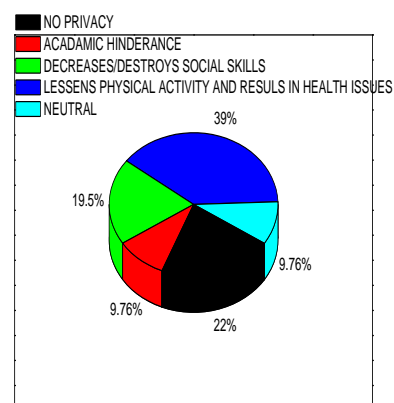


Chart-17: Disadvantages of social networking

## 6.2 LEGAL AWARENESS

6.2.1 Are you aware that whatsapp group admin is legally liable if objectionable information is posted by any member of the group?

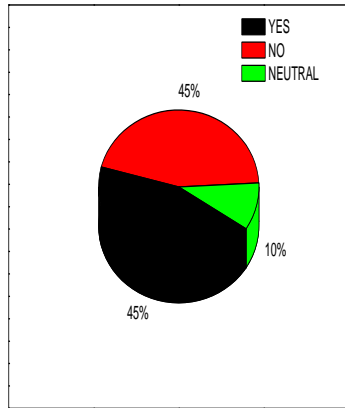


Chart-18:  
Legal issues  
in social  
networking  
part (a)

## 6.3 REMEDY FOR LEGAL IGNORANCE

6.3.1 Has your college helped you know about cybercrimes?

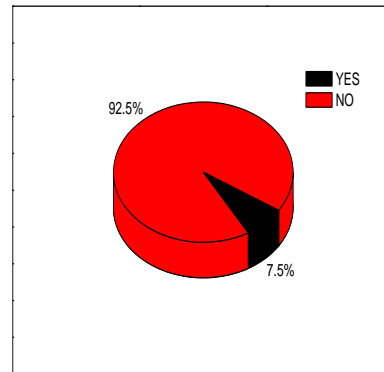


Chart-21:  
Cybercrime  
awareness  
part (a)

6.2.2 Admin is liable under which IPC (Indian Penal Court)?

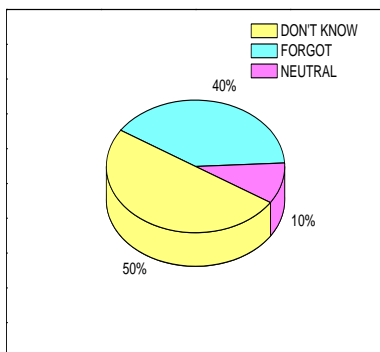


Chart-19:  
Legal issues  
in social  
networking  
part (b)

6.3.2 Are you interested in knowing about cybercrimes?

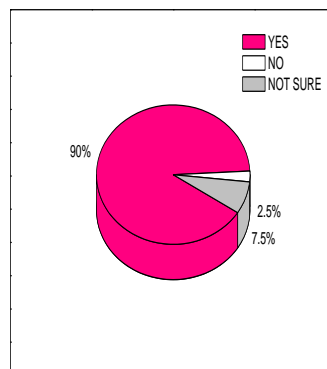


Chart-21:  
Cybercrime  
awareness part  
(b)

6.2.3 How aware are you about cybercrime?

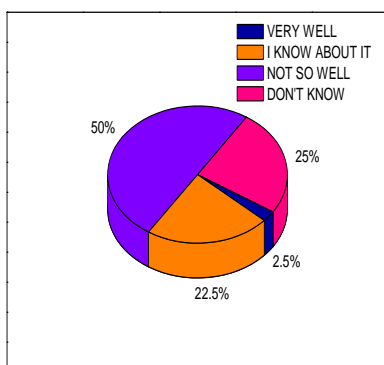


Chart-20:  
Legal issues in  
social  
networking  
part (c)

6.3.3 What type of knowledge sharing about cybercrime would you like from your college?

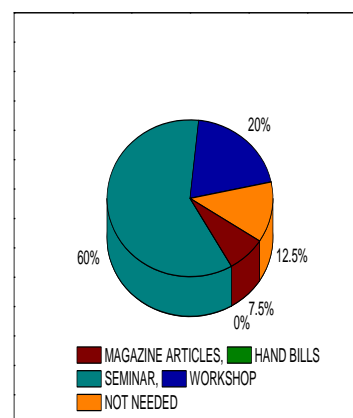


Chart-21:  
Cybercrime  
awareness  
part (c)



Figure – 1: Seminar on Cybercrime dated 17<sup>th</sup> September 2018 at IDSG Govt College, Chikkamagaluru, Karnataka, India. Resource person : Mr. Annamalai K. IPS, DCP (South) Bangalore.

## 7. RESULTS

### 7.1 MAIN PURPOSE OF USING INTERNET

Around 95% of students use mobile for surfing (Chart – 1). 28.2 % of Students mainly browse search engines for knowledge and 23.1 % for social media, around 10-30 % of students make multiple uses of internet (Chart – 2). All students are aware of different types of social networking sites in different proportions. However, maximum percentage of students are well aware of Facebook – 24.8 %, you tube – 11.7 % and WhatsApp – 11.7 % (Chart – 3). Students with a valid social networking account are 77.5% (Chart – 4). Out of these 26.6 % have WhatsApp and 18 % have Facebook accounts (Chart – 5). 25 % of students are using social networking sites from 1-2 years, 20 % of students are more than two years old to these (Chart – 6) types.

61.8 % Students find social networks informative 20 % of them use it for time pass or fun and 18.2 % for friends (Chart – 7). Around 40% of students have more friends on social media than in real life (Chart – 8). 34.1 % of students access social media whenever they have time, 22.7 % students make themselves busy on social media whenever they are bored and 25 % of them at least once daily (Chart – 9). 37.2 % of students are active either between 6-9 PM or after 9 PM and 14 % are active between 7-9 AM (Chart – 10). When asked about parent’s awareness about their social networking activity, 24 % said no and 20 % refused to answer (Chart – 11).

Social networking should be secure hence, when asked about security settings done by them 67.5 % have done such settings and 30% have not, however the neutral 2.5 % are unaware of such options (Chart – 12).

Majority of students – 95 % feel that social networking is useful and essential in today’s life (Chart – 13). Only 7.5 % students feel that it never helps in studies (Chart – 14). Out of majority students who feel that social networking helps in studies 50.9 % have an opinion that it helps learning technology and 34 % want to maintain contacts with friends only (Chart – 15). Students feel that along with advantages social network is disadvantageous. 70 % of them feel it is disadvantageous while 27.5 % disagree (Chart – 16). These 27.5 % along with students who feel social networking disadvantageous agree to the fact that more usage of social networking leads to lessening of physical activity leading to diseases (39 %), there is no privacy (22 %), decreases or destroys social skills (19.5 %) and is an academic hindrance (9.76 %) (Chart – 17).

### 7.2 LEGAL AWARENESS

Around 45 % of students (Chart – 18) are both aware and unaware that whatsapp admin is liable to punishment if members of a group make objectionable posts and 50 % do not know the IPC sections under which such admins are punishable (Chart – 19 a -c). Only 22.5 % of students know something about cybercrimes (Chart – 20).

### 7.3 REMEDY FOR LEGAL IGNORANCE

Students have not been educated about cybercrime and 92.5 % voted this (Chart – 21 a) and 90 % of students were interested in knowing about it (Chart – 21 b). 60 % of students wanted to know about cybercrime and cybersecurity through seminar, 20 % through workshop, 7.5 % through magazine and 12.5 % needed no such education (Chart – 21 c).

## 8. DISCUSSION AND CONCLUSION

Rise in usage of technology has restricted youth activities to mobile screens. Extensive usage of social media has fetched them many friends online who are both known and strangers. In this era when social engineering for committing crime has picked up pace, it is essential that our students are aware of loop holes of Social Medias. We the authors strictly recommend cybercrime and cyber security to be included in regular syllabus and be taught effectively in detail with collaboration between Education Department and Police Department of the District. Only this type of initiative can create a healthy social environment for the highly populated class in our country – Youth.

## 9 RECOMMENDATIONS

Mr. Annamalai K. summarizing his speech told that Use of phones, computers and mobiles cannot be terminated. Youth can however minimize cyber-attacks by adopting following tips:

- 1) Never disclose your personal information.
- 2) Be careful while uploading your photos.
- 3) Do not send or accept friend requests from unknown persons.
- 4) Use legal anti-virus and internet security.
- 5) Create strong alphanumeric passwords with a combination of numbers + lower case + upper case alphabets.
- 6) Use two factor (2FA) authentications.
- 7) Do not click on links in emails unless you are 100 % certain.
- 8) Do not disclose your personal banking username/password/ATM pin numbers/OTP's to anybody.
- 9) Never install 3<sup>rd</sup> party apps, software, cracks etc.
- 10) Make sure you have activated sms + email alerts of all transactions so that you are alerted immediately of wrong transactions.
- 11) Use virtual keyboards while typing passwords.
- 12) Avoid logging into net banking anywhere other than your trusted network like your house or your mobile.
- 13) Avoid using unsecure public Wi-Fi network or accessing account from cyber café's or LAN PC's

## 10 ACKNOWLEDGEMENTS

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