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A SURVEY ON INSECURITY AWARENESS IN SOCIAL MEDIA

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Abstract: Increased use of secure chat and voice/ video apps has transformed the social life. While the benefits and facilitations are seemingly limitless, so are the associated vulnerabilities and threats. The amount of information stored on these mobile devices is tremendous and ranging from personal details, contacts, application data, to exchange of texts and media. This information can became significant evidence during a digital forensics investigation and thereafter in courts. Chat messaging between users becoming most prominent communication medium particularly among youth. Increased use of secure chat and voice/video applications has transformed in social life. While the benefits and facilitations are seemingly limitless. In this paper, analysed the influence of social media through a survey. This paper categorized into two dimensions: influence of social media and find the insecurities associated with it.

Keywords – **Social media Forensics, Android, instant messaging, encrypted communications.**
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I.   INTRODUCTION

Smartphones with Android operating system (OS) occupy more than 87% of mobile market share worldwide and with this rapidly gaining market share, there are high chances that the powerful features available in these devices are used for the wrong doing such as harassment through text messaging, Committing fraud over e-mail, trafficking of child pornography images, etc. Indeed, mobile devices are already showing themselves to have probative information that is linked to an individual with information such as call logs, contacts, text messages, images, videos, navigating search information stored and geo-location information. If the extracted information of this data storage is known then acquisition and analysis become faster during the course of an investigation.

In this paper, a survey about the influence of social media and their insecurities and also analyzed the storage details of these data stored in mobile devices. Social media are interactive internet based applications, user generated content, such as text posts or comments, digital photos or videos and data generated through all online interactions, is the lifeblood of social media. Social media facilitate the development of online social networks by connecting a user's profile with those of other individuals or groups. Social media is growing rapidly and becoming a vital part of everyday life, because of the latest technological revolution. This stunning growth is due to the increasing usage of smart phones like BlackBerrys, Androids and iPhones. These Smart phones make it easy to access any social media platform from anywhere virtually. The mobile versions of these social media sites are so easy to access made it user friendly. As well as the Map services made a remarkable usage through mobile to find direction and places easily. Around 112.3 million blogs, 100 million of videos viewed daily 60 million active social network site users. Since the appearance of smartphone and the subsequent explosion of mobile apps, low-cost or free chat and social messaging apps have proven themselves as a cheap alternative to operator-based text messaging via SMS. Many messenger apps offer features such as group chats, the exchange of graphics, video and even audio messages as well as stickers or emotions.

II. SURVEY FINDINGS

The study was conducted to assess the influence of social media among youth, their insecurities, vulnerabilities and threats related to it. Social media have become prominent parts of life for many young people today. So this survey is done in college students. Most people engage with social media without stopping to think what the effects are on our lives, whether positive or negative. Fig 1 shows that whatsapp is the most prominently used social media. More than 5 hours per day uses the social media including Facebook, WhatsApp, twitter, instagram, gaming sites and blogs also access social media at any spare moments. Social media is the last thing before going to bed and get out from bed.Mainly social media are used for keep in touch with friends and family, meet friends, business, event planning, latest news, inspirations and find employment. There are many positive and negatives in social media. WhatsApp has been used by many people who have seen this survey. WhatsApp tell us they don't record. Technically it can recorded, not only by App Company but also phone users by installing an app or by a hacker. According to WhatsApp privacy policy, your WhatsApp can be tracked if and only if your Government wants to track you and it makes a special request to WhatsApp Company. It is really a long procedure and generally targeted to Government officials and celebrities. Despite the fact that video calling feature on WhatsApp is encrypted. Cyber experts warn the users to not opt for video calling as it can easily be monitored and misused by the hackers. Whereas in recording audio calls for WhatsApp, there are some compatibility issues that might stop you. Whether you're using the PC app or the mobile app, recording can be easy. Recording WhatsApp Video calls are quite straightforward to do. Basically, we're going to take advantage of apps that record video. If you already have your preferred video recorder, it's even easier for you. Just open your preferred app to record video whenever you receive a call and it will start recording the moment for you. And depending on the settings that you've set up, you'll have high-quality recordings or lighter low-quality recordings. Several applications are available in Google play store. We can record the video calls on WhatsApp using third party apps. There is no inbuilt feature on WhatsApp to record audio. For example, Lollipop screen recorder, it also gives you an option to store your recordings directly on SD card.All are aware about the danger of social media but no one takes this as serious issue.The servers of WhatsApp donot store any of the user messages.They store messages only till such time when the user's device gets connected to the network, with a maximum period of 30 days from the date of the message.

The survey is conducted among college students and has an social media account of three to four and use daily three to five hours or more than five hours daily. Research indicates that teenagers who spend more than 5 hours a day on social media are more likely to experience mental health problems such as psychological distress. Teenage girls are particularly susceptible to peer pressure and are therefore at risk of having negative online experiences that can impact their development and lead to anxiety disorders and depression.

They continue to suffer from their study because of constant use. The use of social media has affected the relationship with friends and families. Social media friends and relations are more than real time friends. One of the effects of social media is encouraging people to form and cherish artificial bonds over actual friendship. When a social networking sites goes down or is unavailable many of them are frustrated. Social media platforms can be misused to destroy reputations and blackmailing others. Cyberbullying, stalking and identity theft are some threats faced by the users of social media. Knows that it is not safe is being used for personal needs. Users must be careful about the information they share on social media. WhatsApp give as a chance to erase the messages to be sented. Now WhatsApp have come up with "Delete for Everyone", Feature that will help you to delete all you little embarrassments. There is a way to delete the chat messages from other device but there are a few things that need to be in place for you to do it. Probably the most important is that you only have 7 minutes after you've sent the message to delete it. If anyone has opened that message before you delete it, they will still be able to see it. WhatsApp stores data

automatically in the internal memory. WhatsApp will be stored on your mobile phones internal memory. It can be found under in the internal directory SdCard - Android / Data / WhatsApp/media. So whatsapp is not safe any content posted in a social space can be easily re-posted and subsequently viewed by third parties. Social media lacks proper privacy, which leads to problems for young users ranging from image-based abuse to not getting accepted for a job.
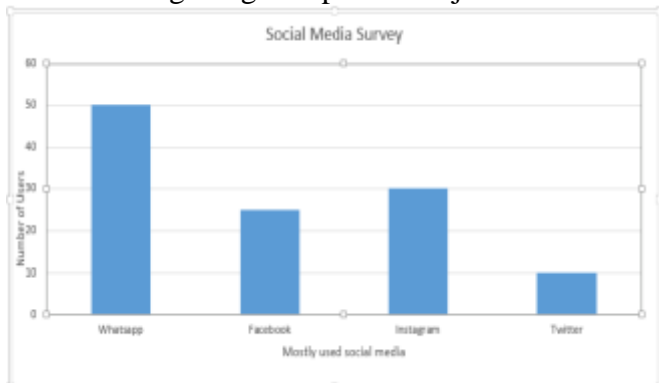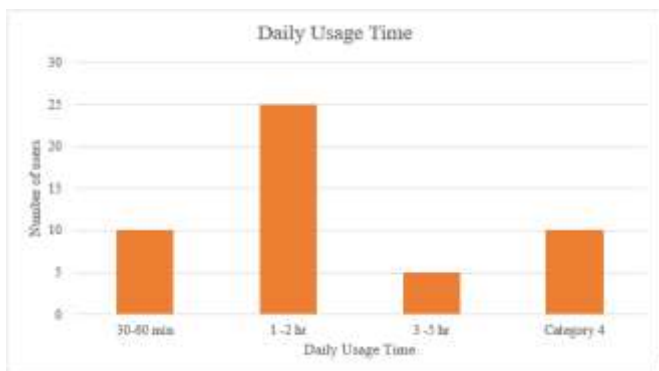

Fig 1: Most used Social Media

Fig 2: Daily usage of Social Media

The average person spends more than 2 hours a day. Social media and mobile phones use with symptoms of depression, anxiety and low self-esteem. A number of studies have found an association between social media use and depression, anxiety, sleep disturbances, eating issues, and increased suicide risk. Sleep disruptions caused by excessive mobile phone use at night, depression and unhappiness. This survey conducted among young peoples, it shows that daily one to two hour they use social media using mobile phones.
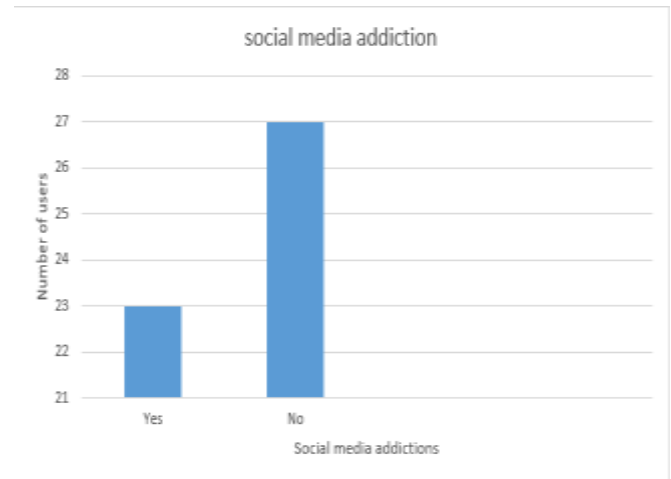

Fig 3: Social Media Addiction

Social media addiction is a term that is often used to refer to someone who spends too much time on social media like Facebook and Twitter or other forms of social media. As a result, it affects the person's daily life. Although there is no official medical recognition on social media addiction as a disease, the negative habit of excessive use of social media has become a subject of much discussion and research. Addiction simply means a compulsive behavior that leads to negative effects. And in this case, social media addiction is referring to someone who has a compulsive use of social media.

A sign indicates that a person is addicted to social media:

• Social media is the first thing you do in the morning.

• You waste your time looking at nonsense and procrastinate.

• You checked in everywhere you go.
• You check notifications all the time.
• You only want to contact and talk to your friends via social media.
• You constantly monitor the "likes" and "shares" you receive.
• Craving for internet connection.

Social media has grown and become a big part of our daily life these days. People just cannot ignore the power of social media today. Even big companies are utilizing the power of social media to create their marketing channel to influence their audience. Social

media has grown and become a big part of our daily life these days. People just cannot ignore the power of social media today. Even big companies are utilizing the power of social media to create their marketing channel to influence their audience. Desires for social media are difficult to control because of the easy-access availability of it, and because giving in to these social urges seems far less harmful than giving into drugs or nicotine. Another interesting finding in the research was the correlation between low self-esteem and social network addiction. Being social online is easier for people who suffer from self-esteem issues, and within this group, an addiction to sites like whatsapp, Facebook, is much more easily formed. One who check yourself is to evaluate your feelings about social media.

Fig 4: Data Security

Social media has radically transformed how people receive and send information, creating a democratized communication infrastructure unlike any of its predecessors. But, with the powerful innovation has come several serious security risks for both individuals and businesses. Among other problems, for example, social media provides a significant unprotected channel for data leaks, it incents people to overshare confidential information, it provides hackers with information that greatly assists them in breaching organizations, and it allows for the dissemination of lies in the form of misinformation or impersonation. Here in this survey, 30 out of 50 users say that data are secure in social media and 13 out of 50 says not secure.
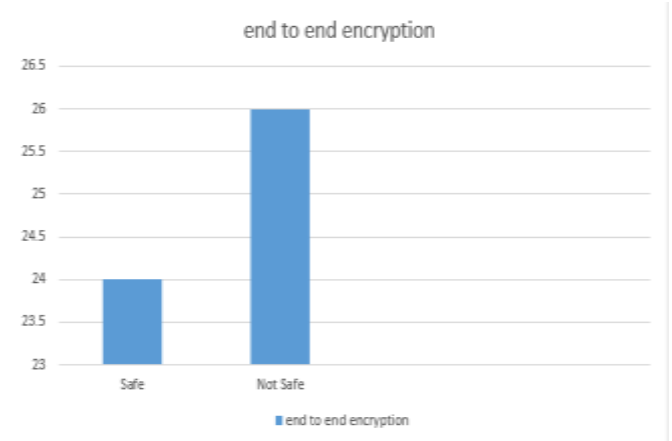

Fig 5: End to End Encryption

In this, end to end encryption is familiar to young people. End-to-end encryption is intended to prevent data being read or secretly modified, other than by the true sender and recipient(s). The messages are encrypted by the sender but the third party does not have a means to decrypt them, and stores them encrypted. The recipient retrieves the encrypted data and decrypts it themselves. Because no third parties can decipher the data being communicated or stored. But they don't believe in end to end encryption because none of the application gives complete 100% security. Majority voted to not safe. End-to-end encryption is the most secure way to communicate privately and securely online. By encrypting messages at both ends of a conversation, end-to-end encryption prevents anyone in the middle from reading private communications.it keeps your data safe from hacks. E2ee means fewer parties have access to your unencrypted data. Even if hackers compromise the servers where your data is stored, they cannot decrypt your data because the does not possess the decryption keys.it keeps your data private. If you use Gmail, Google can know every intimate detail you put in your emails, and it can save your emails even if you delete them. E2ee gives you control over who reads your messages. It's good for democracy. Everyone has the right to privacy. E2ee protects free speech and shields persecuted activists, dissidents, and journalists from intimidation.
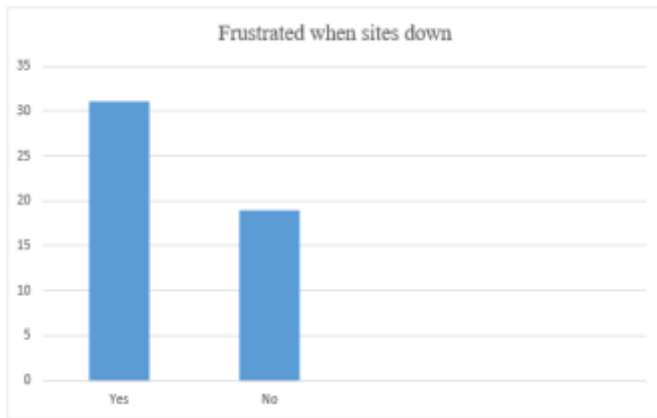
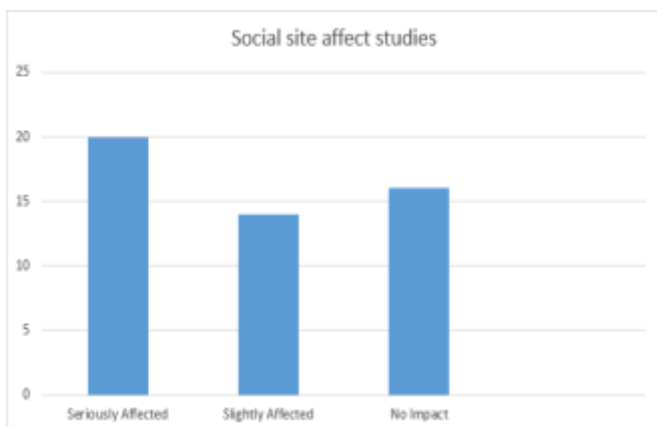Fig 6: frustrated when site down

Fig 7: Social site affect studies

   The social media usage of college students has the potential to affect their grades, social-skills, and time-management skills, but it could be positive or negative effect. Although many parents may be worried that the rise of social media is distracting children from their studies. In addition, they found that those who were particularly active on social media did not spend less time studying. However, those who used social networking sites very frequently, regularly post messages and photos, did have slightly lower grades, although the team stressed that the negative effect is very small. Those who used social media while studying or doing homework also had slightly worse grades than students who didn't use the sites, possibly because this form of multi-tasking distracted students from their work.
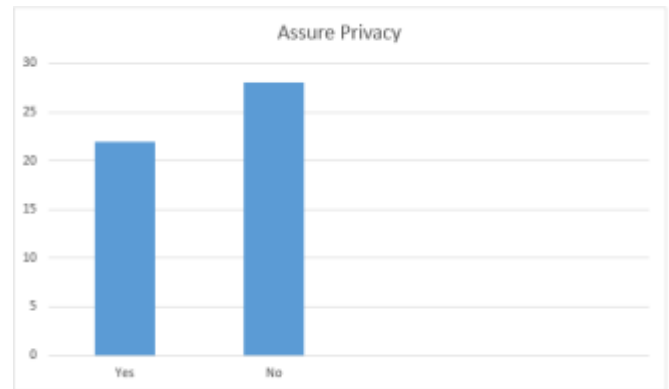

Fig 8: Assure Privacy

Privacy issues and identity theft in social media are a growing concern. The use of social media continues to expand every day. Many are not familiar with how their information will be shared when it has been posted to a social media site. The best methods for privacy assurance vary depending on the social media site being accessed. Here in this survey majority of them says that there is no privacy in social media. Security is also important when handling personal information on social media sites. They contain lot of information that would be valuable to a hacker.

III. CONCLUSION

   Social media plays an integral part in individual's everyday life as well as for companies. Social media brings numerous benefits in peoples life such as to keep in touch with closed ones and especially with relatives who are oversees, to make new friends buy products, share information and much more. Unfortunately several threats also accumulate the countless advantages of social media. The rapid growth of the online social networking sites provides more scope for criminals and cyber criminals to carry out their illegal activities. Hackers have found different ways of exploiting these platforms for their malicious gains. The main goal of this paper analyze about the influence of social media and their insecurities and also the storage details of these data stored in mobile devices. WhatsApp messages can be retrieved from un-rooted devices and also show how these applications store data in the Android file system. The paper proposed a step by step process to acquire WhatsApp encrypted backup files, decrypt them and parse them in human readable format.

Based on the important aspects survey was conducted the most used social media is Whatsapp and more than 2 hours a day they use social media. There is no social media addiction its false daily more than 2 hours usage of social media creates addiction. Then the data security is high but they did not believe in end to end encryption and also there is no privacy. Social media cause more insecurity in relationships social media negatively affects mental health.ie, they are frustrated when sites down. Social media effects on human connection, self-esteem, memory, sleep, attention, span, studies etc. The survey was conducted among college students; most of them answered social media seriously affect their studies. Most using social media is whatsapp there are more vulnerabilities in whatsapp there local storage sharing of data to other socialmedias, web malware, unencrypted backups, encryption vulnerabilities etc. here in this survey, we can decrypt the encrypted whatsapp database on non-rooted android devices and recover the deleted whatsapp messages on Android.

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