Exploratory Study On Awareness About Risk Of Cyber-Crime Among The Older Adults

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Abstract: With increasing use of internet, it is important to secure our valuable and confidential data, but the concept of cyber awareness is still new in India, with the slow pace of adaptation of new technical training and exposure. Amidst the aim of Digital Inclusion, and digital empowerment with the UPI, Digi lockers, Umang and their phenomenal aim to bridge digital gap, digital awareness. People knows how to use technology but do not know how to defend themselves from cyber-attack. The impact of cybercrime among elderly is particularly pronounced with technology and its usage. Elderlies go through emotional shock and financial loss as well. Present study with the use of mixed methodology aims to study awareness about digital media use and find measures for future intervention design for creating programs for generating awareness for efficient use of technology.

Keywords: Awareness, older adults, Digital Inclusion, digital literacy, frauds, cyber crime

Introduction

The advent of Internet with global dimension has revolutionized the lifestyle of masses. This ocean of information which provide finance, friendships, entertainment, education, job opportunities revolving around internet. (Selver, 2005) With expansion of internet use, simultaneously the misuse has also adapted with the advancement in new media and given rise to cyber-crime opportunities. As for large number of masses internet is still new, mysterious and incomprehensible. With fast changing technology internet related crime such as hacking, software-pirating, Vishing, Smishing, fraud done through the high-tech computer are increasing amidst which the need to ensure privacy and freedom of speech of users is also crucial. The IT Act 2000 of India aims to prevent such incidents of unique challenges of cyber-crime to provide sense of safety on digital platforms. With the increasing number of transactions and communication digitally Government offices are also turning official documents in digital format. Present paper discuss the awareness of middle age adults about cyber laws and challenges they face in using them into action as criminal behavior on internet is turning into a major challenge for masses and governing bodies as well. Advanced technologies have changed the modern way of life, the cyber-attacks which are striking the internet regularly, these Cyber criminals can steal our money or damage ones reputation as well. Psychological tricks are where attackers play with the minds of the user to trap them with lucrative offers. Once trapped, the attackers can exploit the victim by either stealing money or stealing sensitive personal information as Aadhaar details, bank account details etc.

Government came up with IT Act 2000 to deal with this new category of crime where one can forge information of the user with criminal intent. As the different industries developed over so does the phenomenon of crime, which need to be timely and legally curtailed. When the mobile or computer is aimed for committing the offense, for stealing information with the help of hacking, cracking, cyberwar fare, Computer Virus, Worms, Trojans spreading in computers if program is executed on the computer. The cyber stalking is reflecting the society where stalking can take place even when a person is sitting in his/her own house. The piracy, copyright infringement trademarks violation or cyber defamation are the forms of crime which has adapted with the speed and reach of internet eventually termed as cyber-crime. Shaw (2016) mentioned with the use of safe data security practices organizations can manage their cybersecurity risk to protect sensitive data from cyber-attacks. Amendments aim to enable users to seek compensation for their grievances along with accountability towards their infringed right. The aim of the research is to understand that whether the generation which was not born in the era of internet rather witnessed its discovery and suddenly shoved in the jungle of digital technology where things are shared with click of a button and stealing can be done remotely. It is important to understand how they are managing with the digital situation.

Objectives:
1. To understand awareness about safety measures against cyber-crime taking place against older adults .
2. To find future measures for creating Awareness against cyber-crime.

Methodology: For present study mixed approach is adapted closed-ended and close ended questions to access seniors' responses that is, the qualitative aspects provide the opportunity to identify and define relevant issues in the of respondents, while mailed surveys provide the kind of coverage necessary to make accurate predictions to the larger population of community-residing seniors. The questions on your survey instruments is used to describe our communities which represent not just issues but also the finer, disaggregated categories that highlight challenges within focus group. Self-administered structured questionnaire designed to measure knowledge, awareness and practice about cybercrime. The questionnaire completed by 127 respondents. Researcher has also used secondary data for the present research, where collected data and information on topic of concern in different research papers, websites etc.

Area of Research Study: The research is aimed at older adult population of Jammu region. Where the selected population of male and female population above the age of 50 years are randomly selected from three different districts, Samba, Kathua and Jammu. For the size of sample random sampling is done where 150 people were provided with questionnaire schedule.

Sample: Total 127 responses were received back from the respondents where the response collected are presented in tabular form with percentage.

Cyber Law in India for Protecting Cyber Space.

When laws related to digital world is talen into consideration, for providing a legal framework for all electronic activities carried out by electronic- digital media in year 2000 the two houses of parliament the Lok sabha and Rajya Sabha passed the Information Technology Bill, which got assent of president and came to be known as The Information Technology Act, 2000 (Jain & Shrivastava, 2014). The different chapters of the act dealing with different aspects such as digital signatures, investigation of offence, adjudication Officer, establishment of cyber regulation appellate tribunal with duties of subscribers, making changes in Indian Penal Code, 1860, the Indian evidence act 1872, The Reserve Bank of India Act, 1934 for making then in tune with IT Act 2000. Along with cybercops, cybercourts, Digital Literacy for common users in the age of internet is required to enable detecting and handling cybercrime. In section 43 A of IT Act mentioned that Indian business and different organizations must have the reasonable security practices and procedures to provide protection sensitive information from being compromised, damaged, exposed or misused. Shaikh & Chudasama (2021) also mentions in their article IT Act 2008 redefined cybercrime and making companies liable for data breaches where one can report cybersecurity incidents to Computer emergency Response Team CERT-in which is a national nodal agency for collecting analyzing disseminating non critical cybersecurity Incidents. (UpGaurd, 2024). In 2013 national cyber security policy released by department of Electronics and Information Technology (DeitY) for public and private organizations and ensuring safety from cyber-attacks by reducing vulnerabilities aligned with their strategic goals. Aggarwal (2015) highlighted Cybersecurity related to fiduciaries as Know Your Costumer (KYC), Digital Personal Data Protection (DPDO) Act 2023 to curb data breach. Regulation by CERT-In mandated that the companies, service providers, data centers to report identified cybersecurity incidents and data breaches within 6 hours, where some organizations mentioned the small reporting window is insufficient. The Cyber Regulation Appellate Tribunal (CRAT) governing body for fact finding, collecting cyber evidence enforce, summon, witnesses, documents.

Cyber awareness among Indian Masses

With increasing use of internet it becomes important to spread awareness about the use of internet for decision making, but lack of digital literacy is crucial to identify, avoid and report any form of cyber-attack. (Raut, Shinde & Patil, 2022). In 2017 the government launched cyber swachta Kendra providing free tools to Indian citizens to detect and clean malware from their devices, on the other hand developed cyber forensic labs in 2022 to provide training to law enforcement agencies. Ministry of Home Affairs MHA launched national cyber-crime reporting Portal to create centralized system to report all kinds of cyber-crimes also Cytrain by national crime records Bureau as a training center for training and reporting against cybercrime. There is minimal adequate training and education that is provided to the users. Cybercrime finds ample opportunities in social media. Additionally, lack of awareness about technological developments has led to an increase in such serious offenses. Gandal (2021).Cyber stalking, cyber pornography, and impersonation are frequently directed at women. To reduce the impact of cybercrime, any strategy should encompass expert guidance, protection from technology-related risks, emotional assistance, and education. Kim (2014). Preventing vulnerable individuals from becoming victims of online scams and avoiding such occurrences can be accomplished by implementing security measures such as firewalls, antivirus software, and regular software updates. More older people are now conducting financial transactions online and using social media to stay in touch with family and friends. The people applied updates automatically, leaving the responsibility for updating outdated software to the device, or applied updates manually, making their devices vulnerable and easy to attack and compromise, installed any antivirus software on their systems. Elderly are unaware of its use. Chudasama, Patel, & Dand. (2020). To see if they keep location private or shared it publicly on social media because they believe it is annoying to use and difficult to deal with. The password should be at least 12 characters long, including alpha and numeric characters, and a mix of both uppercase and lowercase letters with at least one symbol, that is, a special character. With elderly citizens and their lack of technological expertise and vulnerabilities they are frequently become target for cybercrime where they encounter credit card fraud, identity Theft.

Old age adults people and frauds are not a rare phenomenon. The latest technology and digital security measures are often difficult for older adults to keep up with, which makes them vulnerable to tech-savvy criminals. Furthermore, older adults are more inclined to trust authoritative figures and may fail to identify signs of deceit in official-looking communications.

Table 1.1 Gender Ratio of Respondents

Gender	Male	Female	Total
Number	80	47	127
Percentage	62.4%	37.6%	100%

Table 1.1 represent that there are total 127 respondents in which 62.4% are male and 37.6% are female respondents.

Table 1.2 Occupation of respondents

Occupation				
	Male	Percentage	Female	Percentage
Employed	42	33.2%	12	9.2%
Unemployed	38	29.2%	35	27.4%
Total	80	62.4%	47	37.6%

Table 1.2 represent that when asked about the occupation there were 33.2% male employed respondents who are still working where 9.2% female employed respondents between they age of 45 to 65. There are 29.2% unemployed male respondents and 27% of unemployed female respondents.

Table 1.3 Devices used by respondents

Device respondents use	Response	Percentage
Mobile	110	86%
Computer	40	31%
Tablet	24	18%
Laptop	98	77%

Table 1.2 represent that when asked about different digital devices used by respondents, 86% of respondents are using mobile phone for availing internet and social media platforms such as Watsapp, Facebook, Youtube, Gmail etc. there are number of respondents who are using two or more devices. There are 77% of respondents who are using laptop. These respondents have used different devices during their job and sometimes for using different social media sites as Watsapp.

Table 1.4 whether attended any formal digital security awareness program

You have attended any formal digital awareness program	Response	Percentage
In last five year	62	48%
In last ten year	15	12%
Once in life	20	16%
Never	30	24%
Total Response	127	100%

Table 1.2 represent that when asked about the if the respondents have attended any awareness program for digital media use, as it is important for creating awareness for the adult generation for which we have created a new world of digital media and technology to make this conducive for them. When asked about of any awareness program they have attended which helped them to understand digital technology for better use. When asked 48% mentioned they have attended any awareness for digital security in last five year, on the other hand 12% have attended such program in their offices in last ten year and 16% attended in their life once ten year back. 24% of sample respondents said they have never attended any such program

Table 1.5 Do you update your digital devices

Do you update your digital devices	Response	Percentage
Yes	24	18%
No	25	19%
I don't know	78	63%
Total	127	100%

Table 1.2 represented that the Respondents were asked if they have any digital device 18% said yes they have digital device, 19% said they don't have and 63% said that they don't know. There is majority of masses who are have no knowledge of updates required for smooth and risk-free functioning of digital devices.

Table 1.6 How you get your device updated

Update your devise	Response	Percentage
Automatically	15	63%
Manually	2	8%
I don't know	7	29%
Total	24	100%

When asked about the device update most of the respondents said that they get their devices updated automatically. Which gives one revelation that how the technological barons who are creating technical know-how need to come up with resolve

to get software and security automatic as well. Which can be a futuristic business prospect. On the other hand awareness of the respondents is equally crucial.

Table 1.7 Do you install antivirus software in your devices

Do you install antivirus software in your computer or laptop	Response	Percentage
Yes	32	25%
No	40	31%
I don't Know	55	43%
Total	127	100%

When asked do you install antivirus software in your computer or laptop most of the respondent answered as they don't know anything about it, followed by second largest population said that they don't use any antivirus for their devices. Only 25% answered that yes they install antivirus in their computer or laptops in home and offices as well. 31% said no they don't install any antivirus, whereas 43% said that they don't know anything about this. Arfi & Aggarwal (2014) mentioned In their research work as well that it is important to use security program to manage cookies and restore data as otherwise it might prove risky.

Table 1.8 Do you adopt the two-factor authentication mechanism?

Do you adopt two factor authentication mechanism	Response	Percentage
Yes	11	8%
No	52	40%
I don't Know	64	52%
Total	127	100%

When asked whether they use authentication for creating passwords 52% respondents mentioned that they know, even they keep their location private or shared it publicly on social media they do not know. When discussed the Reason for not using two factor Authentication because they believe it is annoying to use and difficult to deal with the password should be at least 12 characters long, including alpha and numeric characters, and a mix of both uppercase and lowercase letters with at least one symbol, that is, a special character. It was new information for a lot of them. When you are protecting a computer system, a loophole or negligence may allow a cybercriminal to gain access and control over the computer system.

Table 1.9 Faced online fraud

Have you faced online fraud	Response	Percentage
Yes	45	35%
No	35	27%
I don't know	47	38%
Total	127	100%

When asked if respondents have faced any online fraud 35% said yes they have faced fraudulent called related to their bank details, their previous job profile and lottery offers. Whereas 27% said no they never faced any such issue and 38% people said they don't know whether they got any such call, message, mail or no.

Table 1.10 Have you ever watched any advertisement for cyber-crime awareness on television

Have you ever watched any advertisement for cyber-crime awareness	Response	Percentage
Yes	12	9%
No	38	29%
I Don't know	77	62%
Total	127	100%

When asked 9% respondents said yes that they have watched any advertisement related to cyber crime on television. They have mentioned about banking related frauds and their awareness they have witnessed. Whereas 29% said they have not watched any program for the awareness towards digital media judicious use. There was the majority of 62% respondents who mentioned that they don't know anything about this. A sheer lack of exposure is also can be observed where even though large majority are using digital technology but the media literacy have a long way ahead.

Conclusion: As in society all citizens act responsibly towards safety in their surrounding similarly we need to create secure cyberspace as Cybersecurity is a shared Responsibility of users, authorities, companies along with the service providers. Internet frauds result in huge monetary losses, reputation losses and put the individual in emotional trauma. It is important to know more about cybercrimes and its laws that protect individuals against such crimes can reduce the

impact they cause. Even complicated by their incapacity to understand the complexities of cyber fraud, related to finance, health insurance, job, or social media frauds which intensifies their sense of helplessness and anxiety. Even the respondents still believe they don't have anything which someone can steal, but a number of retired employees get fraud calls on the name of their departments to get bank details. Elders of our society not only guide us but pave the way for us it is important to make them aware of digital media and their safe use. There is a great need to create advertisement for creating awareness among masses who are new with the use of technology. In the era of digital world, digital literacy is important for all citizens recently netizens. Younger adults also need to make space and build confidence in them so that older adults can trust them with learning and understand the technology, where in case of some problem they can come to them for finding a way rather than dealing with things alone due to the complex technology.

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