

A Critical Study on Impacts of Online Banking Fraud Risk Awareness

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Abstract: Continuing technology developments and innovations are having significant impact on the way banks interact with their customers, suppliers and counterparties, and how they undertake their operations. Banks face the challenge of adapting, innovating and responding to the opportunities posed by computer systems, telecommunications, networks and other technology-related solutions to drive their businesses in an increasingly competitive domestic and global market. The internet in particular offers major opportunities for banks to reach new markets and expand the range of products and services they provide to customers. The very accessibility and dynamism of the internet brings both benefits and risks. The board of directors and management of a bank are responsible for managing its risks, including technology risks which are becoming more complex, dynamic and pervasive. The risk management process requires the board and management to review and appraise the cost-benefit issues on what and how much to invest in controls and security measures relating to computer systems, networks, data centers, operations and backup facilities. Online services have continued to attract businesses and their customers. The availability of resources and quick adoption of technology to conduct online business has been the key to the success of the online business. People's awareness of fraud depends on their understanding of the various ways in which cybercriminals engage in fraud. Customers also incur losses when they engage in fraudulent acts. Such losses have impacts on the mental, physical and social lives of customers..

Keywords: Online banking , Fraud , Risk, Safety, Faster and easier

I. INTRODUCTION

The rationale of this research is to investigate how online-banking private customers are aware of the risk associated with the services. Online banking allows a user to conduct financial transactions via the Internet. The pool of online banking customers interacts with their banks using electronic devices such as computers and mobile devices without visiting a bank branch. The term personal customers are used on the main heading to indicate individual customers or private customers and not business customers. It targets personal customers, who interact with banks to access their savings, withdraw money and make payments among other services without human contacts or the presence of bank staff. The growing popularity of online banking services came after both personal and business customers had started to embrace banking services offered through their electronic interfaces. The power of technology and internet availability across the world enhances greater connections between customers and bank institutions globally. For instance, international banks use online platforms to provide banking services to customers from Africa, Asia, Europe and America and other parts of the world. Online banking is a new era that bank institutions use to interact with customers and provide services to them. They are still learning how to improve those online banking services and build trust towards their customers. Online services have continued to attract businesses and their customers. The availability of resources and quick adoption of technology to conduct online business has been the key to the success of the online business. Because of the attractiveness and comfort of online banking services, there are serious threats currently posed to online banking. Fraud has been the main threat that affects customers. Customers are still in the learning process. They are still learning how they can interact with banks online. While learning to use online services to interact with



their chosen bank institutions, customers have become a weak target of cybercriminals. It is because a significant number of customers cannot understand the online environment. Risks associated with online banking come from the fraudulent activities of cyber and online criminals. People's awareness of fraud depends on their understanding of the various ways in which cybercriminals engage in fraud. Customers also incur losses when they engage in fraudulent acts. Such losses have impacts on the mental, physical and social lives of customers. As the number of users increases the number of cybercriminals also increases. Their main target has been to steal money from ignorant online users. When customers lose money through online fraud, their banks also make significant losses. The findings of this study show that many people are aware of online banking services as well as fraudulent activities.

OBJECTIVES

- To examine that are you aware about online banking fraudulent
- To reveal online banking are vulnerable when it comes to hacking
- To find out the impact of online fraud on personal lives
- To analyse why do people fall under scam

II. REVIEW OF LITERATURE

Renu Singh, Garima Malik (2020) studied and compared the physical clearance of the cheques to the CTS technology, from brick and mortar models of the banks to Internet banking and mobile banking. The research was based on a random sampling method. The main objective is that the government has to look into digitising the entire banking infrastructure where digital transactions will be promoted over other forms of conventional transactions such as cheque, withdrawal, and so on. And the main aim is to promote Cashless Economy with 'Aadhaar Pay' in Rural India. (Singh et al. 2020)

Goel et al. (2017) examined the concept of digitalisation. In this research the Indian government has announced plans to transform India into a digitally empowered society and knowledge economy. Even though our India is moving towards digitalisation there are various issues and challenges which are faced by the rural area people. Due to digitalisation of banking our Indian banking sector has achieved tremendous growth in recent years. (Goel et al. 2017) Shailendra Singh, Megah Agarwal (2015) decided to liberalise the Indian Economy. For any country's economic growth a sound and effective banking system is essential. The bank helps the citizen how to make an investment, deposit and avail loans within the country. After there were some problems existing to overcome those problems the Reserve Bank of India has set up a committee. In India the number of mobile users has increased so the mobile banking system was introduced. (Shailendra et al. 2015) Ranjith, S., and M. Sindhuja (2022) studied country business which had been a dismissed area before, yet with the spread of training and mindfulness among horticulture. Whenever we discuss a country, rural business ventures assume a significant part in the monetary turn of events and contribute altogether to the nation's interaction. (Ranjith and Sindhuja 2022) D.K. Ghosh (2006) studied and explored how rural area people face digital banking issues in India. In India nowadays most of the people started to use mobile phones so most of them were aware of digital banking except some of the rural non literate people. ("Ghosh, (Indranil) Julian, QC 2006; QC (Scot.) 2010" 2007) Ashoka M. L , Rakesh T. S, Madhushree.S (2015) studied Digitization or digitalization of banking administrations has laid out a solid organisation which upholds a fast payment of banking administrations across the world. Advanced financial help has empowered India to be more employable in diminishing the exchange holes among provincial and metropolitan regions. The section uncovers the philosophy of consumer loyalty towards the advanced financial administrations in Belthangady Taluk, Dakshina Kannada area. (Rakesh 2015) Shetty PR, Acharya M, Shetty S (2019) : This paper talks about the advancement of web banking in rustic regions. The utilizations of web banking of a few provincial shoppers in country regions are explored and inspected. The examination objective is to explore the chance of utilising web banking in the new age of the country region. Zeroing in on a few arising patterns in rustic banking. Inside the Indian monetary area, the job of the rustic banks is significant however not clearly pre-famous. (Shetty, Acharya, and Shetty 2019) Mishra et al. (2006) explored India as one of the quickest developing economies where rustic India assumes a critical part in the monetary development of the country. Government has been



empowering banks to open branches in rustic regions with a comprehensive methodology towards monetary development. This has been given further focus by utilising Business Correspondents and Customer Service Points for Financial consideration. Advanced Banking will help in enabling provincial economy by reducing equal economy, further developing simplicity of business and straightforwardness in exchanges. (Mishra et al. 2006) **Shyam Jivan Salunkhe (2002)** explored India, as an Agro-based country, has numerous heterogeneous gatherings abiding and executing in numerous circles. This reality makes it challenging to adapt to Digital Payment and credit only living in the country. This concentrate predominantly centres around execution of advanced instalment framework to elevate credit only exchange to make credit only economy and difficulties looked by this framework for compelling execution and furthermore recommend therapeutic measures. (Jivan 2002) **Tuttle (2005)** studied Rustic or wide open regions generally fundamentally affecting a country's by and large financial turn of events. Most individuals don't have financial balances in a similar region. By utilising versatile wallets individuals from those areas can advantageously make financial balances without genuinely going to a bank office. Versatile wallets likewise present straightforwardness in deals in rustic regions. The rising number of versatile and web clients in provincial regions will make ready for the utilisation of better computerised instalment arrangement over the long run. (Tuttle 2005) **George Mathew (2007)** studied and explored the government and proposed 75 digital banking units. Because of digital banking all the traditional banking systems such as cheques, demand draft, pay in slips are taken away. Given the rapid rise of digital banking, digital payments, and FinTech innovation, it was critical to develop digital infrastructure to support digital banking, which has enormous potential. ("Mathew, George Felton, (1846–12 Jan. 1931)" 2007) **Aparna J Varma, Swati Kulkarni, Ranjith P.V (2018)** discussed how The review is subjective in nature and utilises writing surveys to examine the idea of advanced exchanges. The audits dig bits of knowledge into the different difficulties and benefits of utilising advanced exchanges. The discoveries uncover that computerised exchanges are acknowledged in India and use is expanding step by step. The review observes the benefits and difficulties which are looked by buyers while taking on computerised instalment. (Aparna et al. 2018) **Smita Dikshit, Gurave Singh, Akhilesh Chandra Pandey (2022)** studied about The greatest hindrance is the quickly developing Digital Divide between assorted fragments of the general public in India. Data Technology has additionally imagined a gap in the advanced society among haves and the poor in innovation access and the ability to utilise ICT through computerised banking among the provincial populace. Various obstacles extend the separation, like the expense of innovation, absence of data, foundation and interest in provincial regions. Country change drives can be powerful just when advanced education is viewed as an essential for administration conveyance to the lower layers of society. (Dikshit, Singh, and Pandey, n.d.) **John Vong, Purnendu Mandal & Insu Song (2013)** There are as yet an enormous number of unbanked individuals in Indonesia, especially in the rustic regions. Without legitimate monetary administrations, there can be no economy as banking is fundamental for any advanced economy. Without an economy, the vocation of rustic networks will stay poor. One justification for the huge number of unbanked populace in the country regions is the expense of opening bank offices for low-pay workers. It may not be practical for banks to open branches in provincial Indonesia. (Vong, Song, and Mandal 2013) **Simran Jit Kaur, Liaqat Ali, M. Kabir Hassan & Md Al-Emran (2021)**. The main motive of this qualitative study is to analyse the migrating customers from branch banking to digital banking. Qualitative technique was used to analyse the data. Different types of responses were collected during the survey. It mainly explores the attitude of customers. In India almost all banks offer a digital banking system to all their customers. (Kaur et al. 2021) **B. Vishnuvardhan, Srujan Raju (2020)** In the broad sense, versatile banking (M-Banking) is characterised as the monetary exchange execution through savvy gadgets or electronic gadgets. The significant justification for the development of electronic banking (E-Banking) is because of ceaseless development of Internet speed, offices, individual Digital Assistants (PDAs), Internet-engaged telephones, and planning of banking application. This made one more new subset of E-Banking and M-Banking. (Srujan Raju et al. 2020) **Seamus Grimes (2004)** In spite of the impressive exertion being made by the European Union to uplift the familiarity with the requirement for incidentally found country SMEs to turn out to be more associated with taking advantage of the financial capability of the computerised economy, among the significant hindrances forestalling such an inclusion by provincial SMEs is the trouble of acquiring reasonable high velocity web access in far off areas in this period of changed media communications markets. (Compiled by



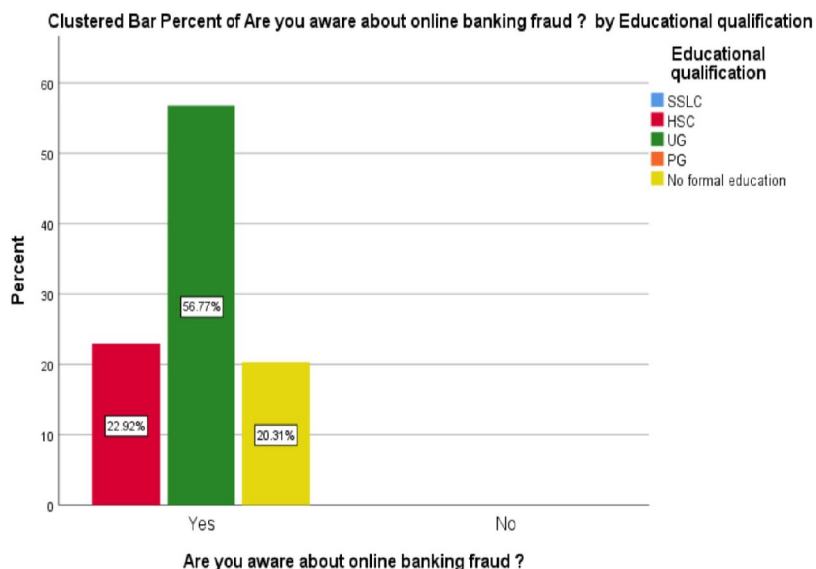
Compiled by the British Library of Polit 2004) **Diana Crossan, David Feslier and Roger Hurnard (2013)** studied and explored shifting of financial transactions from cash currency to digital transactions. India is a country with the intention to transform the country to a cashless society. This study finishes up with an advance notice against hurrying toward computerised banking and the development of credit only economies, as underestimated populaces might be rejected.(OECD 2013) **Shubham Phophalia (2019)** With the presentation of new advances opposite the expansion being used of web in financial area, the working style of Banks have changed impressively, particularly the most significant being the difference in method of instalment from actual instalments to online instalments, where there is compelling reason should be available truly for affecting the said exchanges. Furthermore, this presentation of the web has modernised the banks.(Jain and Phophalia 2019) **David Catling (2012)** They can do the financial exchanges sitting at home and need not visit the parts of banks for anything. Banks use innovation to give nature of administration at an extraordinary speed.This paper attempts to figure out how mechanical developments have been seen by bank representatives in provincial areas of Udupi locale. ((Entomologist) and David Catling 2012)

III. METHODOLOGY

The research method followed by the researcher is empirical research. A total of 211 samples have been taken out through a convenient sampling method. The samples are collected online by the researcher. The present also utilised secondary data from books, journals, and online sources. Independent variables taken here are gender, age, educational qualification, occupation, Place of living and marital status of the respondent. The dependent variables are whether you are aware that online banking fraudulent, To reveal online banking are vulnerable when it comes to hacking and to find out the impact of online fraud on personal lives and also to analyse why do people fall under scam.

IV. GRAPH

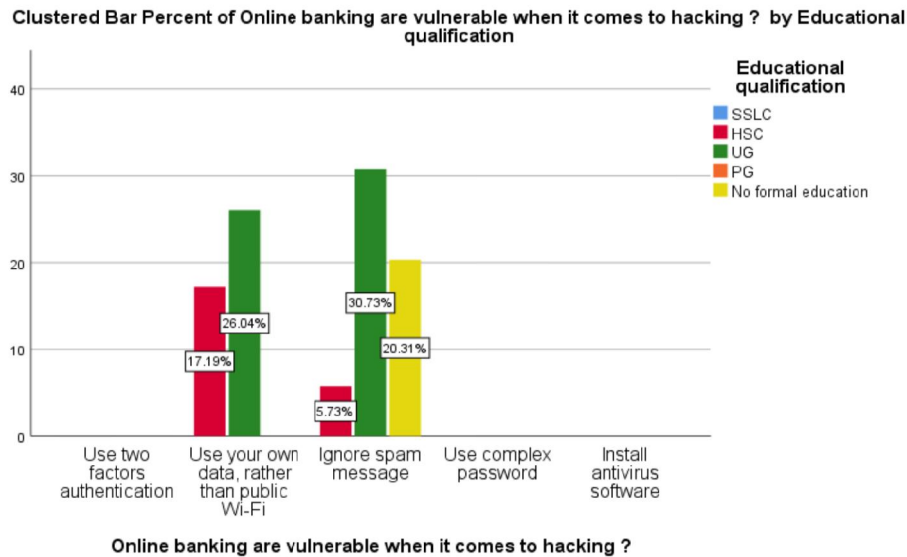
Figure 1



Legend 1 : Figure 1 shows that people are aware about online banking fraud ?

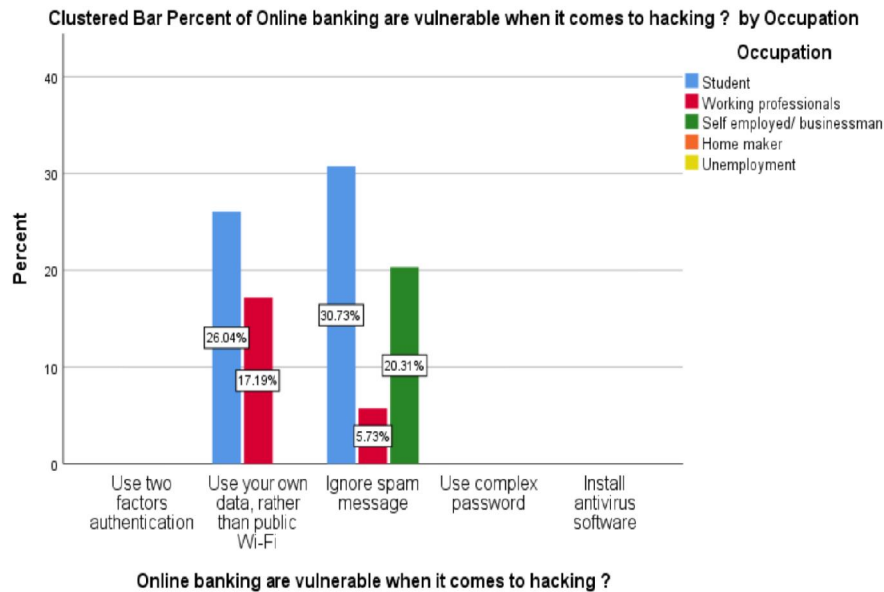


Figure 2



Legend 2 : Figure 2 shows that online banking is vulnerable when it comes to hacking?

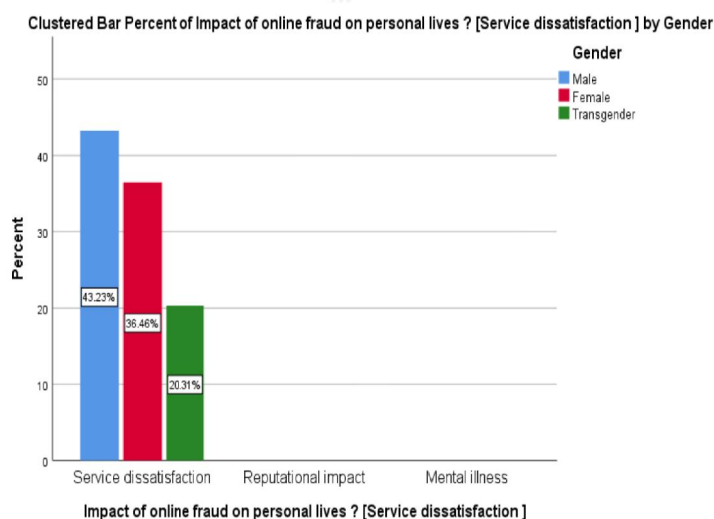
Figure 4



Legend : Figure 4 shows independent variables as occupation and online banking are Vulnerable when it comes to hacking ?

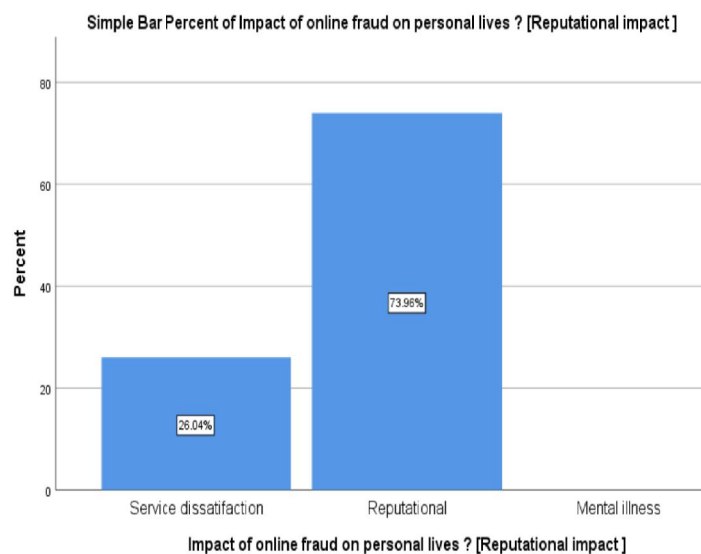


Figure 5



Legend : Figure 5 shows that gender as an independent variable and impact of online fraud on personal lives ?

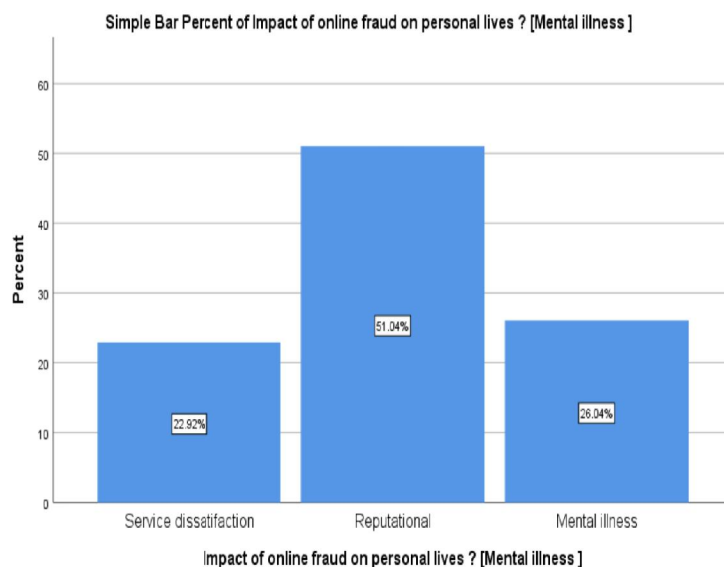
Figure 6



Legend : Figure 6 shows the impact of online fraud on personal lives ? (Reputational impact)

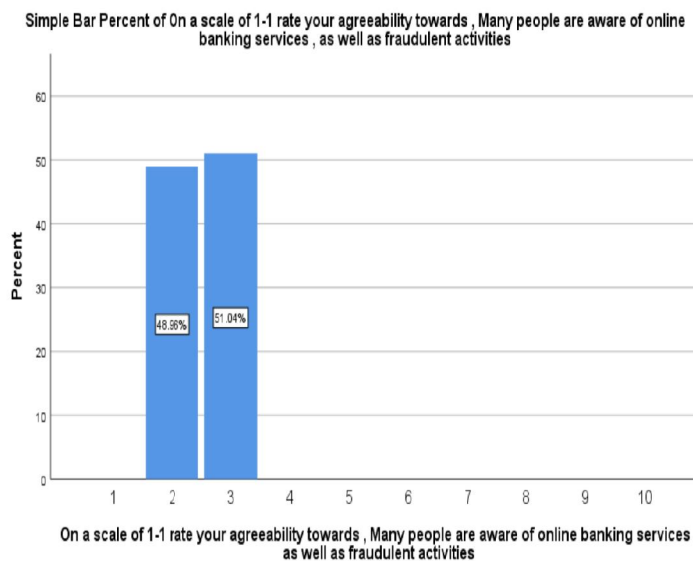


Figure 7



Legend : Figure 7 shows that the impact of online fraud on personal lives ?(Mental illness)

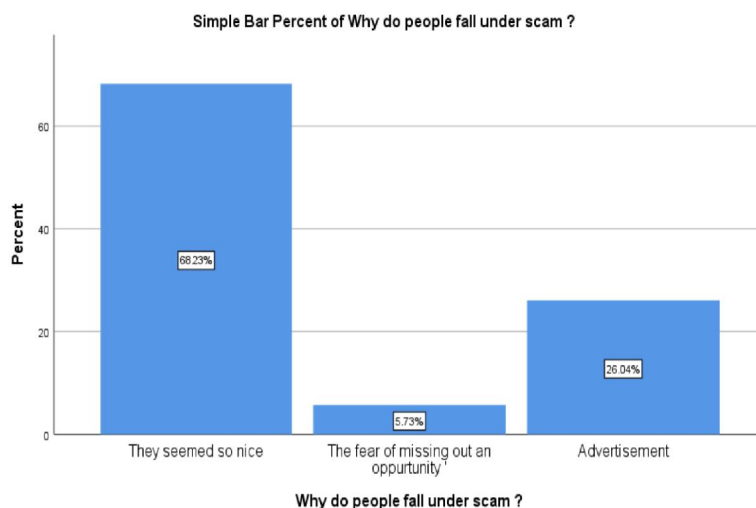
Figure 8



Legend : Figure 8 shows that many people are aware of online services as well as fraudulent activities?

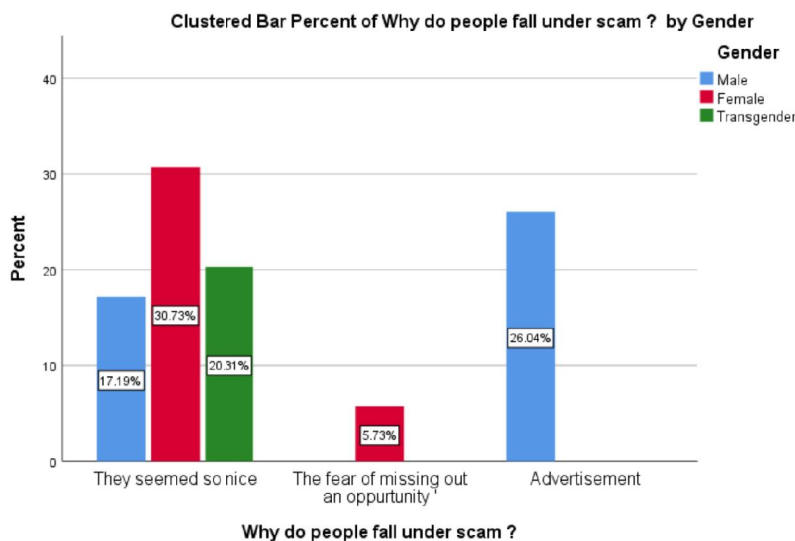


Figure 9



Legend : Figure 9 shows why do people fall under scam ?

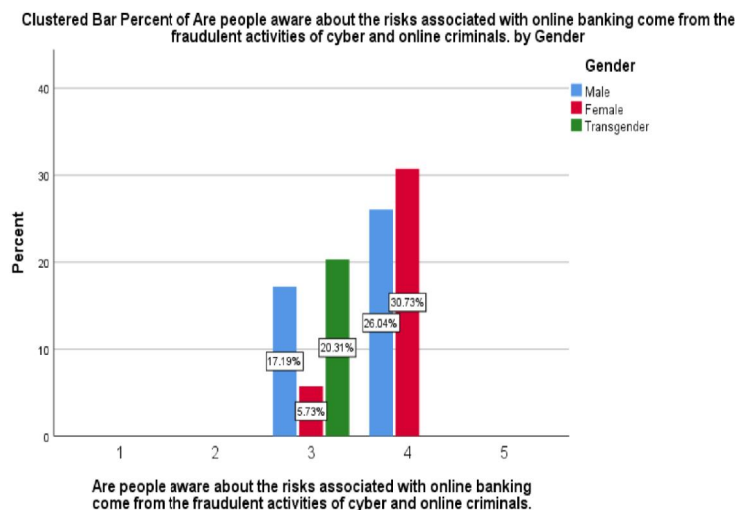
Figure 10



Legend : Figure 10 shows that Independent variable as gender and dependent variable as why do people fall under scam ?

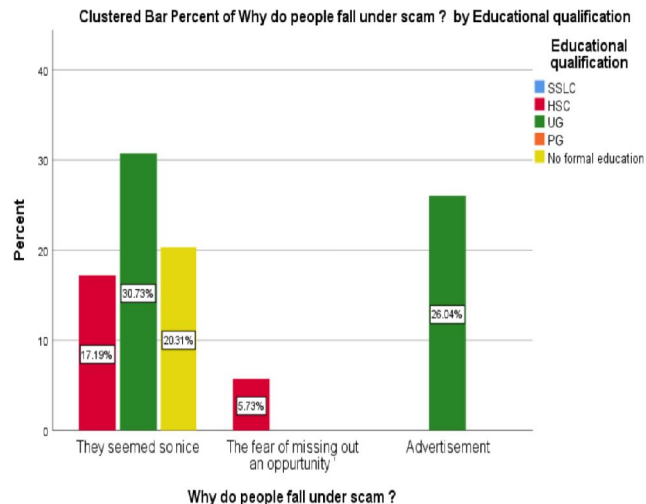


Figure 11



Legend : Figure 11 shows that Independent variable as gender and dependent variable as are people aware about the risks associated with online banking come from the fraudulent activities of cyber and online criminals.

Figure 12



Legend : Figure 12 shows the independent variable as educational qualification and dependent variable as why do people fall under scam ?



V. RESULT

Respondents from the age group of Below 20 years responded the most the least respondents are from the age group of 21-30 years (**figure 1**) Respondents from the female gender group responded the most and respondents from the male gender group responded the least (**figure 2**) Respondents who have completed till school education have responded the most Respondents who are qualified with no formal education have responded the least (**figure 3**) Respondents From home maker sector responded the most and the least respondents are from the Private sector and unemployed (**figure 4**) Most of the respondents earn 41,000 and above per month least respondents earn 10,000-20,000 and 21,000 and 30,000 (**figure 5**) Respondents from the Rural area have responded that most and respondents from the Semi-urban areas are the least responded (**figure 6**) Respondents who are qualified with Undergraduate have mostly responded Yes and the least responded Respondents who are qualified with HSC have responded Same, for the question Best remedy for the increase of technological implication in business sector (**Figure 7**) Respondents who are qualified with Undergraduate have mostly responded IGNORE SPAM MESSAGES and the least responded Respondents who are qualified with HSC have responded Same, for the question Online banking are vulnerable when it comes to hacking (**Figure 8**) Respondents who are students have mostly responded Use your own data, rather than public Wi-Fi and least respondents who are work professionals have responded Ignore spam message (**Figure 9**) Respondents from the male gender group have mostly responded. Service dissatisfaction and least respondents from transgender's have responded service dissatisfaction (**Figure 10**) Most of the respondents have responded reputation and least respondents have responded service dissatisfaction (**Figure 11**) Most of the respondents have responded reputational and least respondents have responded service dissatisfaction (**figure 12**) Respondents who are qualified with Undergraduate have mostly responded Yes and the least responded Respondents who are qualified with HSC have responded Same, for the question why do people fall under scam they answered that the people seemed nice.

VI. DISCUSSION

From the **figure 1** it is found that the respondent who are male respondents who are undergraduate respondents responded that many of them have experienced gender inequality in society. It is found that most of the most of the respondents were affected due to gender inequality in society. The female undergraduate respondent also responded that they have experienced gender inequality in society. From the **figure 2** it is found that the respondents who are between the age of 18-25 and who were earning 10,000-30,000 respondents were responded that many of them have experienced gender inequality in society. It is found that at the age of 18-25 were also gender inequality were faced and also the respondent between the age of 25-40 and who were earning 10,000-30,000 respondents responded the same. From the **figure 3** it is found that respondents who are female respondents were earning 10,000-30,000 the respondents were responding that gender inequality was taking place in the workplace. It is found that the gender inequality were also taking place in the workplace and also the male respondents were responding the same as other respondents. From the **figure 4** it is found that the respondents who are between the age of 18-25 and who are the female respondents responded that gender inequality took place in the workplace and the respondents between the age of 25-40 were responded as same as other respondents. From the **figure 5** it is found that the respondents between the age of 18-25 and who are the female respondents were responded that the ways to reduce gender inequality by education that helps create attitudinal shifts towards gender bias. The respondents between the age of 40-60 who are transgender were responded as same. From the **figure 6** it is found that the undergraduate respondents who are transgender respondents responded that the ways to reduce gender inequality by education that helps create attitudinal shifts towards gender bias. Undergraduate respondent who are female as responded as same as others. From the **figure 7** it is found that the female respondents who are earning less than 10,000 were responded that by spreading awareness about gender inequality is one of the way to reduce gender inequality in India and the transgender respondents earning 30,000-50,000 responded as same. From the **figure 8** it is found that the respondent between the age of 18-25 and who are female responded that by encouraging community ownership in preventing violation is one of the way to reduce gender inequality in India. Transgender respondents between the age of 40-60 were responded as others. From the **figure 9** it is found that the female respondents who were earning 10,000-30,000 were responded that by encouraging community



ownership in preventing violation is one of the ways to reduce gender inequality in India. female respondents earning less than 10,000 responded as same as others. From the **figure 10** It is found that the independence variables education qualification most of the UG students and PG students are agreed that counselling an advisors and awareness campaign modify some cultural practice will help the help the gender discrimination in education. **Figure 11** from the education qualification as the independent variable and what might be the cause of gender discrimination as the dependent variable, found that the cultural religion and ignorance of the cause of gender discrimination agreed by the UG and PG students. From the **figure 12** it is observed that the respondents who are between the age of 18-25 and who are the female respondents responded that we should use our own data rather than public Wi-Fi.

VII. SUGGESTIONS

According to the survey done, most of the people were aware about the online banking frauds. Peoples should use their mobiles and online bankings very safe. As our economy and technology rapidly grows, online banking is also growing rapidly. The growth of cyber Crimes is also increasing. So people should be aware of the crimes and should be careful.

VIII. CONCLUSION

The objective of the present empirical study was to explore consumer's awareness of online banking, online banking fraudulent activities, as well as prospective preventive measures to eradicate online banking fraud in India. The study in fact, has found that factors such as, identifying theft and frauds, Awareness about scam, Insurance Facilities Available, Banking Governance, Poor Monitoring, Scam Through QR code, Fraud Using Screen Sharing Apps prevention, convenience, accessibility, authentication, connectivity security and technology are key factors of online banking usage. The study sufficiently captures all the relevant evidences to classify the bank customers based on their awareness about online banking frauds and fraud prevention measures awareness. The growth of digital transactions in the country shows crucial inclination to accept and adopt 'online banking', solely driven by higher usage and adoption of online banking platforms. It is therefore concluded that 'online banking' through different digital platforms has gained momentum in recent years. In order to cope up with the customers, banks should focus on safety and security measures to gain customer trust and loyalty which are major factors for adoption and intention to use online banking. On the other hand, Government and RBI should devise appropriate strategies to eliminate and different types of frauds and fraudsters in Indian banking context. The present study is an eye opener for banking industry to develop holistic

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