The Empirical Research on the Victims of Telecom Fraud in China—Based on the Record of Victims with Quantification Statistics

Mao Feifei

Jiangsu Police Institute, Nanjing, 210031, Jiangsu, China

Abstract: With the wide application of wireless communication technology and the Internet, the new financial fraud crime--telecom fraud has emerged in recent years which depend upon the modern communication technology. According to the analysis of this kind of cases, we can find that the occurrence of these criminal cases is closely related to the characteristics of victims. But the existing researches are not focused on this problem. It is very important to prevent such telecom fraud happening by analyzing the victims with quantification statistics. First, we collected several demographic categories such as age, occupation, education and gender. Using this data, we determined that the composition of the victims with different proportions. Secondly, we concluded the behavioral traits and the psychological states of these victims with text analysis by grounded theory. Following that analysis, preventive measures are proposed to solve such crimes and forestall more.

Keywords: the telecom fraud; the quantization study; demography; the behavioral traits and the psychological states

1. Introduction

According to the relevant statistics, the telecom fraud crime has a tendency to increase year by year. Because of the particularity of the modus operandi of this case, it breakthroughs the space-time limitation compared with the traditional cases, as the victims and suspects are in the different spaces and the spot of committing a crime is a virtual digital space, so the detection rate is very low aiming the investigation of cases in serious degree. All these are matters worthy of attention. Therefore, it is necessary to make a deep research about the telecom fraud cases, which on the one hand could promote the detection rate of polices about such cases and on the other hand is beneficial to strengthen the prevention of telecom fraud cases. Comparatively speaking, it is more important for us to prevent than to detect.

2. Origin of the Problem

2.1. The research status of this problem

Taking the 'Telecom' and 'Fraud' as the key words to search through China Knowledge Resource Integrated Database(CNKI), the earliest research was in 2009 and then the number of research papers increases annually; Taking the 'Internet' and 'Fraud' as the key words to search, the earliest was 'the Internet Fraud makes its first appearance' published in China Net week in 1998[1]. This essay was not involved with the Chinese Telecom net fraud cases, but it introduced that the American Federal Trade Commission banned a man in Florida to do business activities in Internet, which was the first fraud case involved with the sharply popularized 'Network Auction Company' (Min Dahong, 1998) . The research literature in domestic increases from 2011, and the original research number was enough to 10.In general, the change of number of domestic research literature was accordant with the change of this incidence rate. The themes of research include two classes: one is to analyze and summarize the telecom net fraud cases from the perspective of detection and it stresses the mechanisms, methods and ways of criminal prevention and detection. The other is to analyze the legal problems of this cases from the perspective of laws, such as the characterization of cases, the legal principles adopted in the declaring the guilty of the suspects and the acceptance of the evidence. The research method mostly adopts the case study method. Few researches use a certain number of literatures to make analyses and summarization. To sum up, qualitative researches occupy the most parts of research literatures. Only

little number of cases is involved with the quantitative research, which therefore brings about two problems:

2.2. Sufficiency of Researches

2.2.1. Question 1: Simple Research Method

According to different research subjects and different themes that the subjects pay attention to, the relevant research method has some certain differences but the general tendency is the same. According to the analysis above, the focus to telecom fraud of legal researchers is the characterization of cases, the legal principles adopted in the declaring the guilty of suspects, the evaluation of evidence, relevant legislation and others. Most of the researches adopt the theory speculation method which then accompanies some literature analysis and summarization and next combs the relevant questions. For example, Zhang Xinxian and other people made the comparatively systematic analysis and discussion about the right of jurisdiction of telecom fraud cases, joint crime and the examination of evidence. The researchers give personal proposed projects (Zhang Xinxian, 2012) [2] combined with the characteristics (case study) of such a crime basing on the current legal principles (the interpretation of the literature) and the research generally adopts the theory speculation method. The same method displayed in the study of practical problem, but the emphasizes are a little different. The prevention and controlling methods research of telecom fraud cases that Hu Xiangyang and other people pay attention to combined with a large amount of real cases and relevant law literatures to make analysis and summarization of the characteristics of this kind of case and causes of fluent occurrence. Basing on those, the researchers gave the relevant prevention and controlling methods(Hu Xiangyang.etl, 2010) [3]. The general methods of two researches are similar, but the emphases are a little different: the practical research concentrates on the case study and then accompanies the research literatures as the evidence to support it; the theory research pays more attention to the combing of the literatures. It is to explain by a certain number of cases. The research methods are simple and similar which both concentrate on the qualitative research. This problem indicates that the latter researches should adopt quantitative study or other different research methods and explain such kind of crime from different visions. It could be not only limited in the qualitative study.

2.2.2. Question 2: Loss of Research Contents

Now, the domestic contents of research focus on the criminal prevention and mechanisms, methods and means against the crime. The foundation of researches is all based on the analysis of the criminal actions and suspects. From the practical perspective, the value of criminal prevention is more important than the criminal fighting. Therefore, it is necessary for this kind of research to be the key points. Apart from paying attention to the criminal action process and criminal subjects of crime in effective prevention, the victims should also be the main points of research. Especially when some of consistency of victims is found, the targeted prevention towards the special individuals or effective blocking of the being harmed action could be done, so the occurrence and continue of the criminal action is terminated. But in existing research literatures, the research about the victims of telecom fraud crime is a little. The research combined with quantitative method is only the Jiang Mingjun and other people who adopt self-made scale to make a questionnaire survey about 255 victims of telecom fraud cases in Shenzhen. In the background of high occurrence rate of telecom fraud cases, the research and analysis of victims' characteristics of 255 cases is done. Researchers made statistical analysis to the victims from the view of demography and according to the sheet answers of the victims, the researchers divide the victim type into 'Active taking refugee after trapping into plight', 'Helping others', 'Pennies from the heaven' and 'Internet shopping'. The victims exist acute stress mentality; psychological altruism; obedience to authority mentality; lucky mentality and other mental characteristics. Finally, the research puts forward to an anti-fraud suggestions (Jiang Mingjun.etl, 2014) [4]aiming to the relevant results. From this aspect, the victims' research towards the telecom fraud needs to be strengthened and in this way, the loss of such kind of research could be filled up.

3. Participants and Methods

3.1. Participants

Participants are the telecom fraud victims happened from November in 2017 to May in 2018 in a country-level police office located in the southern part in Jiangsu province. The analysis and combing is according to the transcript of reporting a case and inquiry. The researchers search and collect reports

materials 363, and the practical effective material s are 203 without the repeated and deficient parts, among which are female 77, male 126.

3.2. Methods

The subject research is divided into 2 parts: One part is to make quantitative statistical analysis from view of demography, which includes gender, age, location, profession, education background of victims, and loss amount, method and fund transfer channel also need to be made quantitative statistic. At the same time, the relevant degree of each factor needs to be examined, so to find out whether it is linear dependence. The research adopts SPSS16.0 to make statistical analysis; the other part adopts the qualitative method, which treats the record materials as the survey documents and the qualitative analysis software Nvivo8.0 as the auxiliary tool to deeply analyze the mental factors of the victims who are invaded without presupposes and to discuss which factor has an important influence, so as to provide reference for effective criminal prevention.

4. Research Results and Discussions

4.1. General Demography Characters of Victims and Analysis and Discussions towards Injured Characters

4.1.1. The Demography Character Analyzing Results and Discussions to Victims

(1) The Gender of Victims

The result shows that the male victims are 126 and female victims are 77. The P value of real gender which is tested by Chi-square is 0.001, which has obvious difference. The result shows that the male tend to be the victims of telecom fraud, which is different from the common social cognition-The male as the social weaker is more possible to be harmed. But from the another perspective to make analysis, the occurrence of this phenomenon is related with Chinese traditional social thought-The male participate the social activities and have relation with society more, so the possibility to be injured is higher rather the male themselves are more possible to be harmed.

(2) Location Situation of Victims

The result shows that the victims in urban are 12, victims in suburb 55and victims in countryside 126. The result tested by Chi-square indicates that the P value of obvious level in different areas is 0.000, which displays an obvious difference. The result proves that countrymen are more possible to be cheated compared with people in urban and suburb areas. They are the high risk group to be harmed, then is the suburb and finally is the citizens. As the research materials come from a country-level city, the involved countrymen victims in this paper are all migrated person who come into urban area. This situation indicates that after the group above is separated from traditional and simple village, they have difficulty in getting accustomed to the city life and lack of effective self-protection consciousness and measures, so they are very possible to be the victims of telecom net fraud.

(3) Professions of Victims

The result shows that there are obvious differences among the professions of victims. The P value of significance level is 0.000. In the total number of victims, small businessmen/individual household, unemployed, common workers sums up to 33.5%, which occupies 1/3 of the total number. The second is the clerks, temporary workers and servers. The least number is the students and villagers. What contributes to this result is in the one hand because of their profession, the small businessmen and individual households need to have relation with different social groups, so the risks of these groups to be cheated are increased; The reason why the unemployed and common workers to be the high risk group of those fraud cases is their satisfaction towards their current life situation and willingness to change. Therefore, they are more willing to receive some certain information from the outer world compared with other profession groups, such as hitting the jackpot or rebate. Therefore, they are possible to be the victims of this information. As for the pure villagers and students group, because they have little connection with the society, they shield automatically some certain fraud information. As a result, they have the least number of harmed people.

(4) Education Background of Victims

Because of the record format problem of the record materials, most of the education background in

materials does not be recorded. Among 203 survey objects, only 51 recorded and other 152 do not make records. The distribution of these 51's education background indicates that the P value of significance level of the difference of education background is 0.000, which is an obvious difference. It shows that the victims groups have the education background difference. People with junior high school background is the most possible to be cheated and people with primary school level and junior college or better than the junior college have the least possibilities to be cheated. The main reasons of happening this result have a certain relation with the professional groups. The social groups with primary school background increase their self-protection consciousness; the reason of little person with junior college or better education background being cheated serve the prevention consciousness and skills towards telecom net fraud because of the promotion of their knowledge literacy. At the same time, they have strong ability to distinguish the outside matters, so the possibilities to be cheated are comparatively low. Why do the people with junior high school background have the most victims groups? The reason may exactly approve that our folk 'The drowned people must be able to swim', which indicates that the prevention consciousness is very important.

(5) Age of Victims

The result of statistics shows that the significance level P value of age difference is 0.000, which is an obvious difference. It indicates that age is a comparatively important difference factors in victims groups. From the percentage of every age period, age 19 - 24, 25 - 30 and 31-40 has the largest percentage, which sums up to 74.8 and this is nearly 3/4. The reasons of happening this situation may have two factors: The one reason is that these age period is a process of gradual increase of individual society and gradual strengthening of self-consciousness, so in the premise of excessive self-aggrandizement, people tend to be neglected and careless. Then they lost the prevention consciousness, and as a result, they become the subjects of being cheated; the other one is with the gradual increase of individuals with social connection in these age period, the more they contact with different kinds of people, the higher possibilities of being cheated. Therefore, they tend to be the targets of being cheated.

4.1.2. The Analysis Results and Discussions of Harmed characters of Victims

(1) On the Cheated Amount of Money

The statistics show that among 203 victims of the telecom net fraud, the cheated amount less than 10,000 yuan is 146, from 10,000 to 50,000 43, which demonstrates that if there is more money, the cheated population is less. From the tested result of Chi-square, there is obvious difference. It indicates that the telecom net fraud is the same as the other kinds of fraud in some degree. Whether the victims are possible to be cheated depends on their prevention consciousness in some degree. The less cheated amount of money, the lower individual prevention consciousness. As a result, person is possible to be cheated; the more amount of money, the higher individual prevention consciousness and alert. As a result, population of being cheated is less. Of course, it is may related with social properties' distribution state. The population foundation which lies on the social bottom level and have low income is large. Therefore, proposing that the possibilities of being cheated of different properties are the same, the largest population of being cheated must be the low-income people. Besides, the accumulation of individual wealth needs some time, which makes them have lots of social experiences. It may be one of the reasons that they are the fewer people being cheated.

(2) On the Cheated Methods

The methods of being cheated are also very different, and the result tested by Chi-square reaches to the statistical significance. From the current situation, the methods accumulate in the phone calls and web information and Wechat and QQ also accounts for a proportion, which demonstrates that the means and methods that criminals used changed continuously. The short message account for the less proportion, and this situation is accordant with the transform of the current social communication methods. The instant messaging devices represented by QQ and Wechat are gradually substitute traditional short message method.

(3) On the Transfer Channels of the Cheated Fund

Just the same as the cheated methods, the different channels of transferring the cheated money also have the significant difference in statistical significance. From the recoding statistics, the worst-hit area lies in Alipay and ATM, which two fund transfer channels account for 62.6% of the survey objects. This percentage had been over a half of the total amount. If the emerging Wechat and QQ wallet are being added, those fore transfer channels account for 76.9% of the total victims. This percentage is over

3/4. From the text analyzing result of the 203 valid reporting records made by researchers, the reasons why those four channels accumulated are that the criminals utilized victims' dissymmetry and not such acquainted with those fund transfer channels; another important reason lies in the dependent operation of the victims and they lacked of the social support, so once they are cheated, it is hard for them to get rid of the trap. This point could be approved in sideways from the counter transfer record which had only 5 victims. Because there are intervenes of the professional clerks in bank, the happening of being harmed could be avoided effectively. Therefore, this kind of method has the lowest number of victims.

4.2. Relation between General Demography of Victims and Analysis Results and Discussions about the Harmed characters

		gender	age	profession	education	region
methods	Pearson Correlation	122	308**	114	.074	029
	Sig. (2-tailed)	.084	.000	.107	.294	.685
	N	203	203	203	203	203
channels	Pearson Correlation	161*	.101	105	.006	018
	Sig. (2-tailed)	.022	.151	.136	.932	.804
	N	203	203	203	203	203
amount	Pearson Correlation	.154*	.201**	.109	012	.098
	Sig. (2-tailed)	.028	.004	.123	.868	.164
	N	203	203	203	203	203

Table 1: The Relation between General Demography and Harmed characters

According to the relevant analysis results, some factors of demography characters and some factors of harmed characters have a certain relation, as some relevant level significance of some factors reach to 0.01 and parts to 0.05. Specifically speaking:

(1) Gender Factor

The relevant analysis of gender factor shows that firstly this factor is related with cheated fund transfer channels significantly, as the significance level is 0.05 and the correlation index is -0.161. The degree of correlation is related with low level, which is negative correlation. Basing on the encoring regularity of cheated fund transfer channel which is researched by researchers, the female have more tendencies to pay in means of Alipay and other modern internet paying method than the male. Secondly, this factor is related with cheated amount of money with 0.01 significance level and 0.154 correlation index. The degree of correlation is correlation in low level, which is positive correlation. It means that the amount of money cheated of male is much more than the female, which may has relation with male's more production and operation activities involved when they go out, as such activities involve more funds.

(2) Age Factor

The relevant analysis demonstrates that age factors and cheating method correlation indicates a high correlation with 0.01 significance level and -0.308 correlation index. The degree of correlation is related in middle and low level, which is negative correlation. According to the encoding regularities of cheated methods which are researched by researchers, people with older ages are very possible to be cheated by traditional phone calls and short messages and people with younger ages are very possible to be influenced by Wechat, QQ and other modern instant messaging tools and in such ways to be cheated. Secondly, the age factor and cheated amount of money has significant correlation with 0.01 significance level and 0.201 correlation index. The degree of correlation is related in middle and low level, which means that people with the older age are more possible to be cheated. It is consistent with individual social wealth.

(3) Profession Factor

The relevant analysis indicates that the profession factor has no obvious correlation with cheated amount of money, methods and fund transfer channels. The professions that people take up will influence whether the individuals are very possible to be cheated, but the cheated characters and

^{*.} Correlation is significant at the 0.05 level (2-tailed).

^{**.} Correlation is significant at the 0.01 level (2-tailed).

profession characters are not correlated.

(4) Education Background Factor

The relevant analysis shows that the education background factor has no significant correlation with cheated amount of money, methods and fund transfer channels. It means that the education background will influence whether the individuals are possible to be cheated, but the cheated characters and education background is not correlated.

(5) Region Factor

The relevant analysis shows that the region factor has no significant correlation with cheated amount of money, methods and fund transfer channels. It means that the region will influence whether the individuals are possible to be cheated, but the cheated characters and region that individuals are located is not correlated.

5. Conclusions

5.1. The dissymmetry of information is the main reason that causes the victims to be cheated.

Looking from the regional characters of victims, age characters and fund transfer channels, why a large amount of telecom fraud could be successful continuously lies in that the suspects fully utilize the victims unacquainted with the relevant information, so the information of cheaters and people who are cheated does not symmetrical. The suspect grasp large amount of information about some fields, but the victims have little knowledge about it. Or because that the victims are from the village areas, they are not accustomed with new life, learning and working surrounding in cities, which causes them failed in obtaining sensitive information timely and in such a way, they are possible to be cheated.

5.2. The weakness of prevention consciousness of objects is another reason that victims to be cheated.

Looking from the victims' age, region, gender and education background characters, and another reason that leads to the victims to be cheated is the weakness of individual prevention consciousness. The adults, male and individuals with middle degree education background always have strong self-consciousness but weak prevention consciousness. Therefore, they become the main objects of being cheated, just as the folk says 'The drowned people must be able to swim'. This point has fully demonstrates that importance of prevention consciousness meaning to preventing the happening of such cases. The high risk group resulted by regional factor mainly because that they failed in cultivating and establishing prevention consciousness in traditional countryside, which demonstrates that the countryside is comparatively plain.

5.3. The lacking of social support is the third reason that leads people to be cheated.

Looking from the regional factor and fund transfer channels, the workers who steps out of the village to go into cities separate themselves from the original mother body- traditional family village society, which means that they lost the asylum of social group, so they do not know how to do in cities and lack of effective social support. Without specialized social group, they could not avoid the cheating information, so they are very possible to be the victims of internet and telecom fraud. Besides, looking through the fund transfer channels, the tools with the most serious problem are Alipay, ATM and Internetbank, whose operation have other people's intervenes and also lack of effective social support so to avoid cheating information.

Acknowledgement

Project of Jiangsu Provincial Department of Education "Research on Victims of New Fraud Crimes and Crime Prevention" (No. 2018SJA0461).

References

[1] Ming Dahong. The Internet Fraud makes its first appearance[J]. China Net week, 1998,

The Frontiers of Society, Science and Technology

ISSN 2616-7433 Vol. 4, Issue 4: 62-68, DOI: 10.25236/FSST.2022.040411

(9):61-61.

- [2] Zhang Xinxian, Cui Jie, and Ju Jiajia. On Several Difficult Issues Concerning Phone Fraud [J]. People's Procuratorial Semimonthly, 2011, (8): 15 19.
- [3] Hu Xiangyang, Liu Xiangwei, and Peng Wei. Research on the Prevention and Control Countermeasures of Telecom Fraud Crime [J]. Journal of Chinese People's Public Security University(Social Sciences Edition), 2011, (5): 91-98.
- [4] Jiang Mingjun, Zhang Xinzhi, and Hu Junmei. Research on the Psychology of Victims of Telecom Fraud [J]. Chinese Journal of Forensic Sciences, 2014, 75 (4): 45-47.