Portraits of the Most Severely Affected Population in Online Violence

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Abstract: In today's new high-tech era, the phenomenon of cyberviolence, with the proliferation of social media in most people's lives, has attracted global attention to cyberviolence and its victims. More and more research evidence shows that victims vulnerable to cyber violence share many similar characteristics. So, this paper aims to conduct a scientific study to find out the specific portrait of the vulnerable victim group. This paper collects data from network questionnaires, frequency analysis, validity analysis, reliability analysis, and chi-square test. A total of 437 random Chinese netizens participated in this study; the results of the study show that the people who are vulnerable to network violence, basically in line with the portrait, the experimental results present: the susceptible boys are those who are Gentle and Kind, have a postgraduate education, are underage, and work in the service industry. The susceptible girls are radical, with a high school education or below, aged 10-19, primarily underage, and working as housewives. This paper can provide direction for cybersecurity practitioners to reduce the harm suffered by victims of cyberviolence.

Keywords: cyber bullying, victim portrait, social media, safeguard rights and interests, types of online violence

1. Introduction

With the advent of the new era of high technology, the Internet and cell phones have been widely used. This has made social media a part of the general public's lives and strengthened the ties between people. However, while these technological tools bring people convenience, they also bring harm and aggression [1]. This has made online violence a global public health issue, with evidence suggesting that 10-30% or more of children and adolescents have been affected over the past 30 years [2]. During daily social media use, people are frequently attacked and harassed by strangers and users of unauthorized information [3]. Online violence has produced many negative aspects for netizens. It exerts dramatic adverse effects on physical and mental health, academic achievement, social relationships, and well-being [4]. Individuals subjected to online violence will have serious emotional consequences, increasing the risk for long-term depression and suicidal ideation [5,6]. Specifically, these victims have more internalized problems [7]. Of course, this is a normal phenomenon, and the emergence of new human cultures brings with it both good and bad aspects, and it is essential to be prepared for these negative impacts. There have been many studies of risk factors, and a combination of demographic variables and characteristics can provide a more direct picture of the victims [8].

This paper used an extensive questionnaire on psychological issues affecting the victims. By conducting a statistical analysis of respondents' choices, this paper aims to explore the salient characteristics displayed by these five variables and to summarize and analyze the susceptibility profile. The experimental results presented the male characteristics: gentle and friendly, good to get along with 10-19 years old high school and below, and the experimental results presented the female characteristics: gentle and friendly, good to get along with, high school and below, 10-19 years old girls. Society needs to increase its protection of these two portraits, and groups of people who may be victims of cyber violence should learn more about the law and how to address it.

2. Methods

2.1. Design Principles of the Questionnaire

This self-administered questionnaire, "Research on the Characteristics of People Most Vulnerable to Internet Violence." The questionnaire has 18 questions that explore the characteristics of the most vulnerable groups of boys and girls to Internet violence. Questions 1-5 were about basic personal information, questions 6-9 were about the basic knowledge of the surveyed groups about cyber violence, questions 10-12 explored what factors of cyber violence specifically affect these groups, and questions 13-18 were about whether the surveyed groups could effectively protect themselves in the case of violence [9]. Secondly, 50 groups of open-ended questionnaires were administered to determine the options for the formal questionnaire. The results of the questionnaires showed that there were five aspects of factors, personality, gender, age, occupation, and education, and these five options were considered as a priority [10]. The questionnaire was designed to incorporate these five points fully.

2.2. Data Collection and Brief Description of Data

The questionnaires that were qualified in terms of reliability and validity were distributed utilizing online social media delivery, and a total of 437 valid questionnaires were obtained. The study mainly used SPSS 27 to analyze the data of the collected 437 samples by using descriptive statistical analysis, ANOVA analysis, and analyzing and discussing the results of their data. The study used a questionnaire survey method; the research subjects were from different social occupations, and the samples were obtained by simple random sampling. A total of 437 questionnaires were recovered.

Regarding gender, 210 (48.1%) were male, and 227 (51.9%) were female, making the number of males and females even more, which is the ideal data type for the study. Thirty-seven respondents (8.5%) were in the age group of 10-19 years, 233 (53.3%) were in the age group of 20-29 years, 121 (27.7%) were in the age group of 30-39 years, 31 (7.1%) were in the age group of 40-49 years, and 15 (3.4%) were in the age group of 50 years and above. Many respondents were aged 20-29. The number of respondents with a high school education or below is 31, accounting for 7.1%; the number of respondents with a college education is 136, accounting for 38.2%; the number of respondents with undergraduate education is 222, accounting for 50.8%; the number of respondents with postgraduate education is 45, accounting for 10.3%, and the number of respondents with doctoral education is 3, accounting for 0.7%. Most respondents are college-educated and university-educated. Among the respondents, there are 53 professionals (12.1%), 39 service workers (8.9%), 17 freelancers (3.9%), 12 workers (2.7%), 102 company employees (23.3%), 44 institutions (10.1%), 141 students (32.3%), 15 housewives (3.4%), 13 retired (0.2%), 1 other (businessman), 13 retired (0.2%), 1 other (businessman), 1 other (businesswoman), 1 retired (0.2%), and 1 other (businessman). 32.3%, 15 housewives, 3.4%, 1 other (businessman), 0.2%, and 13 retired, 3.0%. The respondents are mainly students and company employees. Among the interviewees, there are 102 people with lively and cheerful characters, accounting for 23.3%; 79 people with lively and cheerful characters, accounting

for 18.1%; 123 people with quiet characters, accounting for 28.1%; 37 people with aggressive characters; accounting for 8.5%, 89 people with gentle and affectionate character, accounting for 20.4%, and 7 people with other character, accounting for 1.6%. Most of the interviewees are quiet.

3. Experimental Results and Analysis

3.1. Cyber Violence with the Most Profound Impact

In Figure 1, it can be seen that the respondents think that the more harmed options, the number of people who think that it is a personal attack is 257 people or 58.81%, the number of people who think that it is a rumor slander is 291 people or 66.59%, the number of people who think that it is the promotion of violence is 163 people or 37.3%, the number of people who think that it is the human flesh search is 332 people or 75.96%, the number of people who think that it is a moral accusation is 159 or 36.38%. The number of people who thought it was other was 10 or 2.29%. The online violence factor of human flesh search will affect most respondents, and the rest of the personal attacks, rumors, and slander, the number of people is also more than 50%.
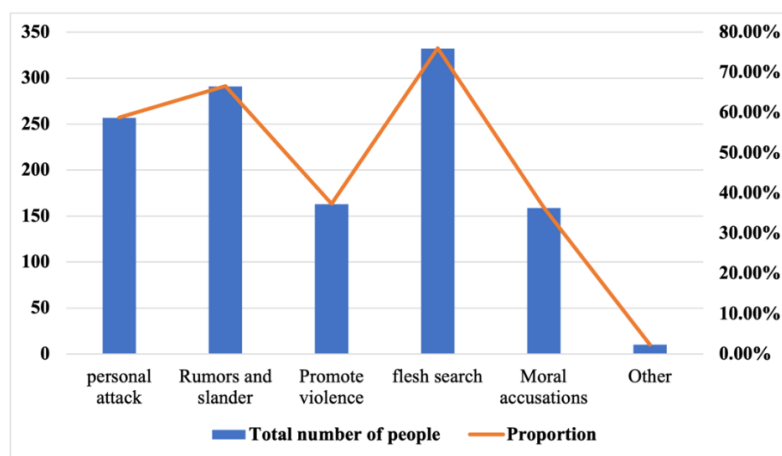

Figure 1: Influence Cyber violence.

3.2. Comparison of the Extent to Which Men and Women Are Affected by Cyber Violence
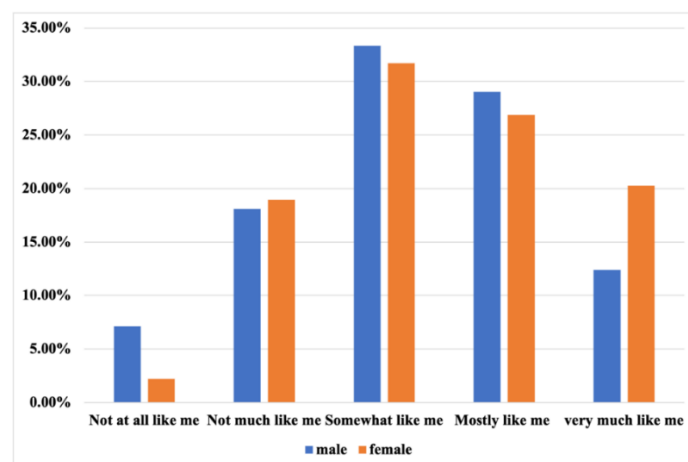

Figure 2: Male and female affect to Cyber violence (a).

Figure 2 shows that compared to the interviewed male group, the interviewed female group has more obvious symptoms of being affected (feel sad), and the interviewed females are more likely to be affected by cyber violence than the interviewed males.
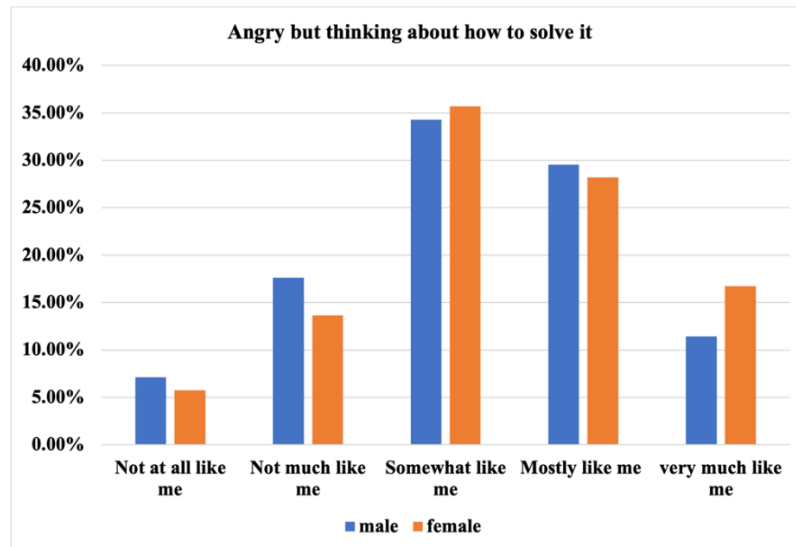

Figure 3: Male and female affect to Cyber violence (b).

Figure 3 shows that the interviewed females are more traumatized after being exposed to cyber violence compared to the interviewed males. The degree of being affected is deeper.
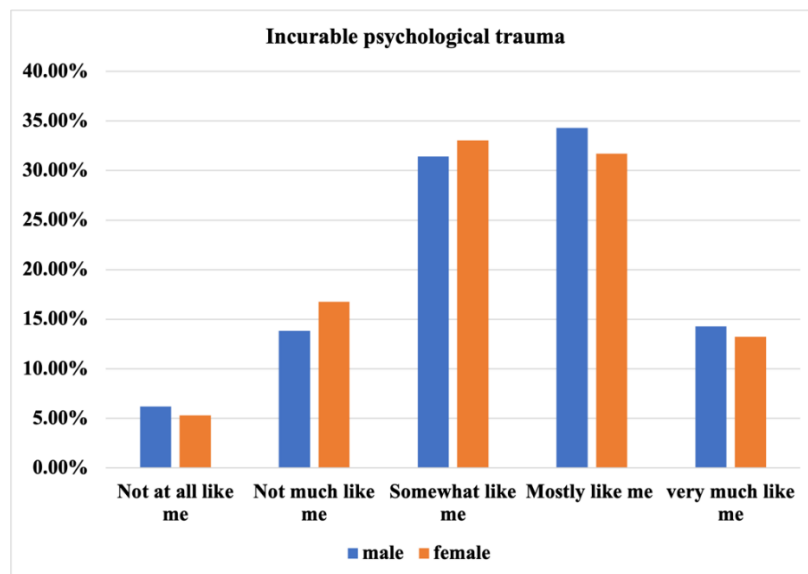

Figure 4: male and female affect to Cyber violence (c).

Figure 4 shows that when encountering cyberviolence, male respondents are more likely to think about it than female respondents, reflecting that female respondents are more likely to be affected by cyberviolence than male respondents.

3.3. Individual Portraits of Men and Women Vulnerable to Cyberviolence

After the first step of data analysis, it was found that the female respondents were more vulnerable to cyber violence than the male respondents. The data was organized again and then divided into two

data for males and females. A second analysis was carried out, this time wanting to explore the different victim profiles of males and females.

Table 1, 2 show the table after dividing males and females into two main groups, forming a group with four demographic variables, and finally doing a cross-analysis with the two options 1 and 7 of the 10th question. (The two questions, 1 and 7, are because it is easiest to know whether they are affected.) Figure 10 shows that the susceptible boys are Gentle and Kind, have postgraduate education, are underage, and work in the service industry. Figure 10 shows that the susceptible girls are radical, with a high school education or below, aged 10-19, primarily underage, and working as housewives. From this, we can get two portraits that are consistent with the predicted portraits. (For the accuracy of research, this paper excludes ten or fewer samples.)

Table 1: Male and female to five factors (a).

	I will feel sad	Difficult to heal psychological trauma	total
male/Gentle and Kind	3.27	3.49	6.76
male/radical	3.06	3.5	6.56
male/arrogant and indifferent	3.31	3	6.31
male/Lively and cheerful	3.19	3.1	6.29
male/quiet	3.17	3.12	6.29
male/High school or below	3.11	3.78	6.89
male/postgraduate	3.33	3.33	6.66
male/junior college	3.27	3.17	6.44
male/undergraduate course	3.18	3.19	6.37
male/10-19	3.75	3.58	7.33
male/40-49	3.33	3.44	6.77
male/30-39	3.35	3.24	6.59
male/20-29	3.11	3.10	6.21
male/worker	3.25	3.75	7
male/service	3.41	3.5	6.91
male/Professionals	3.24	3.33	6.57
male/official of the company	3.35	3.19	6.54
male/student	3.18	3.17	6.35
male/freelance	3	3	6
male/Public institutions	2.81	2.62	5.34

4. Discussion

The results of the study have presented a portrait of the population vulnerable to cyber violence if the legislation requires the relevant social media registration to add some demographic variables to fill in the information and then use the program to push the relevant methods to protect themselves accurately, and popularization of some of the relevant laws so that it can be effective in protecting people from becoming victims. The results of the study have presented a portrait of the population vulnerable to cyber violence if the legislation requires the relevant social media registration to add

some demographic variables to fill in the information and then use the program to push the relevant methods to protect themselves accurately, and popularization of some of the relevant laws so that it can be effective in protecting people from becoming victims. First, under the notarization of the notary public, keep the evidence (which can be handed over to professionals or lawyers), use the online platform, put the abuser as a joint tortfeasor, and then wait for the court to request the online platform to provide personal information of the abuser ex officio. Then, finally, the victim can go to court to file a lawsuit against the abuser to make him/her take legal responsibility. Of course, this is also a good reference for network security workers. Meanwhile, this paper will continue to increase the sample size in the subsequent research, redesign the two genders for men and women of different questions and research, and add experience, interest, and other factors to increase the generalization of the results.

Table 2: Male and female to five factors (b).

	I will feel sad	Difficult to heal psychological trauma	total
female/Gentle and Kind	3.56	3.38	6.94
female/arrogant and indifferent	3.4	3.53	6.93
female/quiet	3.23	3.35	6.58
female/radical	3.68	3.63	7.31
female/Lively and cheerful	3.52	3.16	6.68
female/other	4	2.5	6.5
female/High school or below	3.77	3.82	7.59
female/postgraduate	3.67	3.39	7.06
female/undergraduate course	3.44	3.39	6.83
female/junior college	3.2	3.17	6.37
female/10-19	3.76	3.48	7.24
female/50 and above	3.11	4	7.11
female/30-39	3.44	3.34	6.78
female/20-29	3.42	3.35	6.77
female/40-49	3.32	3.14	6.46
female/housewife	4	3.93	7.93
female/service	3.53	3.71	7.24
female/retired	3.12	3.88	7
female/student	3.54	3.37	6.91
female/Public institutions	3.26	3.48	6.74
female/Professionals	3.38	3.31	6.69
female/worker	3.25	3.25	6.5
female/official of the company	3.35	3.09	6.44
female/freelance	3.3	2.8	6.1

5. Conclusion

With the frequency of cyber violence in people's lives, the number of victims of cyber violence continues to increase. It can make the victims distressed and cyber security workers brain dead, so it becomes vital to provide a victim portrait. This study systematically researched and analyzed the intuitive and reliable data extracted from the questionnaire, resulting in two sets of portraits. The susceptible boys are Gentle and Kind, have a postgraduate education, are underage, and work in the service industry. The susceptible girls are radical, with a high school education or below, aged 10-19, primarily underage, and working as housewives. This paper finds that the susceptible personalities, both male and female, share some common characteristics regarding age, manifesting as minors. In terms of education, there is generally a preponderance of people with high school education and below. In this experiment, these two characteristics will impact whether the respondents are susceptible. This paper hopes that in the future, based on the research methodology of this experiment, the sample size will be increased, and more demographic variables and factors will be analyzed comprehensively so that the portrait of the victim will be more precise.

Authors Contribution

All the authors contributed equally and their names were listed in alphabetical order.

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