



# Exploring the Influential Factors of Chinese Teenagers' Privacy Disclosure on Social Media

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**Abstract.** In the modern era with the developed Internet, teenagers' privacy disclosure on social media has become a social problem of public concern, and it is also a hot research topic for educators and sociologists at home and abroad. The central research question of this paper is: in an increasingly digital society, what are the influencing factors that encourage teenagers to reveal themselves? This study examined adolescents' views, attitudes, and practices on privacy disclosure, gender differences in privacy disclosure, and the impact of parents on adolescents' privacy issues. In this project, questionnaires and semi-structured interviews are used to conduct in-depth research on the surrounding teenagers. This study found that as a huge group of Internet users, teenagers still have potential privacy leakage problems. Society has low awareness of people's privacy protection. Teenagers belong to a group with weak privacy awareness, which should be paid more attention to.

**Keywords:** Privacy · Social Media · Teenagers · Privacy Concerns

## 1 Introduction

### 1.1 Research Background

#### 1.1.1 With the Development Trend of Younger Netizens, Teenagers Have Become the Main Force of Social Media Use

With the rapid development of the Internet and information technology, social media occupies an important position in people's lives and its importance is increasing day by day. The convenience of the Internet has enabled more and more people to master the methods of using social media, and the number of Internet users has also increased. Among all social media users, teenage users are the main group, and the scale is increasing. According to the survey of CNNIC, by the end of December 2014, there were 277 million young netizens in China, accounting for 42.7% of the total netizens.

As shown in the figure, from 2009 to 2015, the number of teenage users of social networking platforms only increased, showing an upward trend, and the data is very large (see Fig. 1 in Appendix).

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### **1.1.2 Teenagers' Privacy Leaked Frequently, Creating Huge Risks**

Nowadays, the use of social media is becoming more and more extensive, which brings great convenience to people, but at the same time, people's privacy is gradually becoming more transparent on social media. The youth group shows a high willingness to self-disclosure, and the threshold for information release is low, so young people often produce, collect, and share their information to the entire online world, which has become their way of life. However, such a situation digitizes users' information, which means people's privacy is exposed consciously and unconsciously. In addition, in the modern era of the advanced Internet, teenagers' self-expressive behaviors on social media are becoming more and more pronounced. "Self-representation behavior in social media refers to an information dissemination behavior in which individual users voluntarily disclose any personal information to a target person in a public network environment and, in doing so, achieve the goal of maintaining interpersonal relationships or achieving personal needs satisfaction through the network. Empirically understood, there should be a negative relationship between users' privacy-concerned attitudes and self-representation behaviors, and we usually tend to believe that social media users with strong privacy-concerned attitudes will reduce their behavior of disclosing personal information on social media, or even refrain from doing so" [1]. But as adolescents, "[they] are motivated and ambivalent on social networks, and even though they have certain privacy concerns, they are still motivated by the 'motivation to communicate with others' to expand their social circle" [2]. Therefore, teenage privacy has become a social issue of public concern and a hot topic of research for domestic and international educators and sociologists. In particular, teenagers are one of the most vulnerable groups to reveal their privacy, suffering from the threat that their privacy may be leaked at any time and the danger of privacy leakage risks. In the existing academic research, there are few studies on the privacy of adolescents, and there are even fewer studies on adolescents' real participation and realization of their consciousness. This paper focuses on the influential factors that of Chinese teenagers' privacy leakage on social media.

## **1.2 Research Significance**

### **1.2.1 Theoretical Significance**

This paper studies the impact of micro-factors on the privacy leakage of adolescent users. It will started from three aspects: the influence of gender differences among adolescents, the influence of adolescents' perception and psychology, then extend to the influence of parental role model. These three aspects are from oneself to the outside world, from the inside to the outside. This path delves into the micro-influencing factors of adolescent privacy leakage. The research enriches the relevant theories on the research on privacy leakage and privacy protection behavior of social media adolescent users, and proposes the possibility of mitigating the problem.

### **1.2.2 Practical Significance**

On increasingly high-tech social media, teens are more willing to self-disclose themselves. In the era of digital media, privacy leakage of adolescent users often occur, which

makes the research on the correlation between various factors and adolescent privacy behaviors an important part of research on privacy behaviors of social media users. Among them, their privacy leakage problem needs to be paid attention to and reduce the risks caused by privacy leakage. This paper urgently need to determine which factors influence and motivate young people to actively disclose themselves and make the privacy leaked on the Internet. After finding various factors, professionals can propose solutions more effectively, thereby reducing the security risks brought by privacy leakage to young people. In addition, privacy disclosure has brought some anxiety to the youth group, which makes the youth user group feel troubled. We find out various factors, such as anxiety caused by gender differences, or "the parental concern will accord raise teenagers' concerns about personal privacy" as Xu bailing said, parents' anxiety can be transmitted to teenagers' more privacy anxiety, and so on. After finding the source, we can find the right remedy [3].

## 2 Literature Review

### 2.1 Privacy Theory

Since Harvard Law Review first proposed the concept of privacy rights in 1890, the theoretical discussions on privacy and privacy rights in countries around the world have become more extensive and in-depth. "Modern Chinese Dictionary" defines privacy as: "persons who are unwilling to tell others or unwilling to disclose" without their permission, shall not be spied on, disclosed, and disseminated. The earliest definition of privacy in foreign countries is "the right to be alone (Abbreviation for the right of solitude)." Webster's Dictionary defines privacy as the state of being private from public attention or company. From a legal point of view, privacy refers to private data, private affairs, and information in the private field that are not related to the life of others or public interests. It is a concept constrained by time and culture, and its content is very broad. Improve, especially the liberation of natural person's personality, its content and information are also increasingly rich. Liang Huixin mentioned in the Essence of Privacy and the Concept of Privacy that the natural right of individuals is the essence of privacy [4]. Privacy arises from the moment man grabs the leaves to hide his shame. The sense of privacy is the first manifestation of natural man after entering human society. It should be born before human labor, i.e., before a primitive man can think abstractly, he has developed similar consciousness and feeling. Among them, shame and the sense of privacy derived from it are the first instincts to appear. Therefore, the existence of privacy, which is inalienable to the public, is a feature of natural rights.

### 2.2 Self-disclosure Theory

In Jourard and Lawrence's research, self-disclosure is "the process by which others learn about themselves" [5, 6]. Much is known about the causes and consequences of self-exposure to relationships. The study points out that the determinants of self-exposure are both personal and social. Race, gender and cultural factors are all major. Early research by Jourard proved that women are more exposed than men [7]. He believes that this is

because of the influence of social expectations. When men grow up, they find that they are inappropriate to express and show themselves like women. They are afraid that if they express too much true feelings, they will be laughed at and rejected. In the same-sex relationship, the self-disclosure between women is more than that between men; in heterosexual relationships, gender differences are more complex. Studies have shown that women are more exposed to each other than men are, and women are more likely to ask each other to expose themselves. This is because people's different expectations of gender roles lead to gender differences in self-exposure. That is gender subculture. Franzio and Davis found that adolescents with high personal self-awareness were more willing to reveal their own information [8]. Therefore, it can be predicted that in network communication, if individuals do experience a high degree of personal self-awareness, they will have a higher level of self-disclosure. Our research found that there was a significant positive correlation between College Students' self-disclosure to the best heterosexual netizens and their personal self-awareness and public self-awareness. Research in social psychology tells us that relationships begin with low levels of self-exposure and low levels of trust. When people begin to expose themselves, this is a sign of a trusting relationship; and the other person responds with the same level of self-disclosure, a sign of acceptance of the trust. In the same way, people posting their own information on social media are a typical self-disclosure behavior. This suggests that people want to develop intimacy with others on social media and gain a sense of social worth through self-disclosure. This is what Fan Ju mentioned in the research review of online privacy issues (2008), in some cases, people are more willing to sacrifice some personal information to obtain certain benefits [9].

### **2.3 Relationship Between the Rise of New Media and Teenagers' Privacy Issues**

Internet is the English name of the International Computer Internet. It is the largest and most popular computer network in the world. At the same time, it has formed a global and open information resource network through special communication interfaces and scale. Due to the widespread area and the convenience of spread speed, some information dissemination channels are formed among the audiences, thus forming the audience needs of network media. Social media was born from the internet. Thanks to the internet's ability to transmit information beyond time and space, it has developed rapidly and has become an inseparable part of people. With the development of social media, the netizen population is huge and tends to be younger. Many teenagers are exposed to explosive information before the three views are fully established. Sun Binfeng's research on privacy protection of adolescents in the new media environment (2009) shows that the people, things and values that adolescents encounter when they grow up in society will affect their own values and directly affect their understanding of privacy [10]. Therefore, there may be a bias in the understanding of privacy, which greatly reduces the degree of privacy concern and protection. And they have a very weak awareness of protecting personal privacy. In many cases, they will reveal a lot of privacy unintentionally, which will damage personal privacy.

## 2.4 Relationship Between the Rise of New Media and Teenagers' Privacy Issues

Before the advent of social media, traditional media such as television, newspapers, magazines, and Web 1.0 controlled the creation and dissemination of information. In addition, companies can fully understand the market response of products and brands based on public feedback in socialized media and then adopt more targeted product development and marketing strategies. The development of media can greatly promote economic development, and a large number of media users and the long use time will become a temptation that the market cannot control. Taking big data as an example, McKinsey & Company proposed big data in 2011. The predecessor of Amazon, Co., Ltd., began to use big data analysis functions after that, and its revenue doubled many times that year. It can be seen that big data algorithms are of great help in improving market development. However, at the same time, the behavior of big data analysis has violated user privacy in the opinion of some scholars and has recently been discussed vigorously.

In response to the above literature, the research question is proposed: Exploring the influential factors of Chinese teenagers' self-disclosure on social media. The research hypotheses are also proposed: 1. Girls' privacy are easier to be leaked than boys are. 2. Driven by capital, teenagers' awareness of privacy protection is becoming weaker and weaker due to their sense of satisfaction on the internet. 3. Parents' concern for privacy are directly proportional to their children's concerns for privacy.

## 3 Methods

### 3.1 Questionnaire Survey Method

The questionnaire and released it on 4.26, which stopped on 5.1. A total of six days were released. The target is teenagers aged 14–18. The statistical tool used to conduct the survey is Wenjuanxing, a professional online survey platform. After six days, 105 questionnaires have been collected, including 28 boys and 77 girls, of which 26.7% are boys and 73.3% are girls. There are 30 questions in the questionnaire. In particular, different targeted questions are presented in order to avoid differences due to gender. Each option has a displayed proportion. When collecting data, the proportion of options can be clearly seen and thus analyzed for results.

### 3.2 Statistical Analysis

#### 3.2.1 Effective Questionnaire Standard

There are two valid questionnaire criteria for this questionnaire, the time of filling in the questionnaire and the age of the respondents. Suppose that the effective answer time for a question is at least 2.5 s. There are 30 questions in this survey, the time required for the valid questionnaire is greater than or equal to 75 s. Questionnaires less than 75 s are invalid. Since our research subjects were adolescents, the effective age would be 14–18 years old. After screening, a total of 96 valid questionnaires were counted. There were 25 male and 71 female students, most of them came from Chengdu, Shanghai, Shenzhen and Jiaying.

**Table 1.** Four Criteria of Statistical Analysis

Research Subjects	Study Angel	Independent variables	Dependent variables
Article-Title 14–18-year-old Chinese teenagers	Exploring the influential factors of Chinese teenagers’ self-disclosure on social media	Psychology of self-Disclosure, Perceptions of self-disclosure, self-disclosure experiences, privacy anxiety.	Willingness of self-disclosure or protective behaviors

**Table 2.** Questionnaire Scores of Privacy Issues Under Different Privacy Concerns of Teenagers’ Parents

Teens’ parents/score for questions	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Average
Show great focus	2.78	3.35	4	3.32	3.62	1.42	3.82	2.16	2.68	3.44	4.08	3.14	3.28	3.96	3.22
Show general focus	2.93	3.34	4.2	3.67	4.13	1.12	4	2.28	2.74	3.3	4	2.9	3.28	2.87	3.2

**3.2.2 Four Criteria of Statistical Analysis**

Regarding the data analysis of the questionnaire, a statistical analysis were conducted that involves research subjects, study angel, independent variables, and dependent variables (see Table 1).

**3.2.3 Positive Correlation Verification Method**

We conducted a questionnaire survey on the relationship between the privacy concerns of teenage parents and adolescent users’ own privacy concerns.

There are fourteen questions in total, and the higher the score, the higher the privacy concerns. There are two issues including privacy anxiety and privacy protection. Questions about privacy protection are 1–6, and questions about privacy anxiety are 7–14 (see Table 2).

Among them, adolescent users whose parents attach great importance to their privacy in question 2, 6, 10, 11, 12, and 14 scored much higher (see Table 3).

**3.2.4 In-Depth Interview**

After a large-scale questionnaire survey, there is a preliminary understanding and judgment of the correctness of our three hypotheses. To add variety and complexity to the breadth of research perspective, in-depth interviews were conducted to explore the hypothesis from another aspect. The interviewees were three boys and three girls randomly selected from the participants of questionnaire. In addition, two girls and one

**Table 3.** Some Questionnaire Questions

Number of questions	Content
2	"I still have privacy concerns after using social platforms for a while."
6	"I have carefully read the privacy protection agreements and terms on social platforms."
10	"As far as I am concerned, even if it achieves a certain purpose (money, emotional purpose), I will not reveal my privacy."
11	"I am concerned about the risks of posting or providing personal information on social platforms"
12	"I don't think it's a risky but worthwhile attempt to reveal my message to each other on social media."
14	"I rarely post my personal information on social media in order to be appreciated by others."

boy are from Jiaxing, and the other one girl and two boys are from Chengdu. The interviews were conducted by telephone and then their responses were recorded. After the results of the interviews were obtained, a comparative analysis method was applied to the interviewees. Questions started from basic information, self-disclosure cognition, self-disclosure psychology, exposure anxiety and protective behavior. A total of 7 interview questions were included in the interview, which were practical. The personal experiences and feelings of the interviewees were used to help better understand some real cases about privacy and their attitudes towards it.

The interviews were audio-recorded. After the interviews, recording the manuscripts of the interviews and putting their responses into these aspects for analysis and comparison. This allows to verify gender differences in adolescents' willingness to self-disclose on privacy issues.

## 4 Results

### 4.1 Gender Differences

Detailed research results show that girls use Weibo more often (76.62%) than boys (25%), while girls use Little Red Book almost three times more than boys, with boys using it 21.43% of the time and girls 74.03% of the time. The concept of Little Red Book is "share photos and videos, share shopping tips, record life stories, and make friends with people who know how to live", which highlights that girls prefer to share their lives and make friends on social platforms, so they are more likely to accidentally disclose their personal privacy (see Fig. 2 in Appendix).

From the inside, girls prefer to be recognized on social media and realize a completely different side of themselves from their real life. According to statistics, 71 teenagers were mostly willing to share their real feelings and thoughts through online software, accounting for 67.62% of the total. However, at the same time, sharing daily photos

(including selfies and full-body photos) accounted for a large percentage, with 62.34% of girls but only 28.57% of boys. The results of this study suggest that girls may be more willing to showcase themselves on social media in order to receive praise from others. In addition, 35.06% of girls were more willing to present themselves on social media than 25% of boys in the option “chat with people I have not met face to face” (see Fig. 3 in Appendix). The risk of leaking is also higher than for boys, which also suggests that girls are more likely to contact people they don’t know on social networks and form their own “circle of friends”. They will post their carefully Photoshopped selfies and videos on the internet as a way to achieve their inner approval of themselves on the internet while getting compliments on their selfies from strangers they have never met. They enjoy the moment of being praised and loved on the internet so much that they sometimes forget to protect themselves in reality. And the rise of the current era’s idol culture has sunk thousands of young girls who are obsessed with perfect-looking male idols. They vote for them on the internet, raise funds, and so on. In the process, they also get to know online friends in the circle who like the same idol. Thus, the new media’s idol culture has become a major security risk for teenagers’ privacy. The girls say that people who like the same idols are like-minded people, so it is important for them to get together and get to know each other. But the internet cannot guarantee the authenticity of anyone’s information, so it can also make girls too addicted to “meeting like-minded people” and start to socialize with others and then reveal their personal privacy.

## 4.2 Teenager Themselves

The results of the study show that all adolescents have the habit of using Internet software, with 13.33% of them using Internet software more than 7 times a week. Overall, in terms of the software used, the most frequently used software among the 105 teenagers surveyed was WeChat, which statistically accounted for 86.67% of the overall usage rate. Meanwhile, the most used software by teenagers are Weibo and Bilibili, both of which are popular entertainment software for teenagers to express their opinions and find like-minded friends, but this also increases the risk of privacy leakage among teenagers. The emergence of the Internet era and the current reliance and necessity of young people on social software has gradually diluted their awareness of privacy, thus in their habit of inadvertently leaking their privacy.

Of the six teens interviewed, three were male and three were female. Five of them (three boys and two girls) said they would still use the social media platform they use most often if it compromised their privacy, but they would be more cautious. As one of the girls said, “every software I have will have the risk of exposing information. In the age of the Internet, we cannot avoid exposing our privacy. I just need to use it more carefully”. Only one girl said that “I would not continue to use it because I will lose trust in this social software, it cannot keep my privacy secret.” Chinese social media platforms have recently started to publish the IP addresses of their users. A boy said he “had no opinion and didn’t have to worry about it. Because you can check it out anyway”. Five people thought it would make them uncomfortable because “users should choose whether they can disclose it or not. If it is forced to disclose, I feel that my privacy has been violated”. This shows that teenagers do understand that online software has some risk of compromising their privacy, but online software has become such an integral part



of their lives that teenagers continue to use online software even though there is some risk. Society generally believes that the leakage of personal privacy can cause some anxiety, but the percentage of those who chose “No” to the question “Your geographic location has been leaked and makes you feel afraid and anxious” was as high as 87.62% (see Fig. 4 in Appendix). Of the six students surveyed, two male and two female students were not concerned about privacy on a scale of 1–10, and they were concerned to a degree of 1. In addition, one female student was somewhat concerned to a degree of 3, and one male student was very concerned. All four students believed that “there would be no serious consequences if [their] privacy was compromised on social media”. Usually, “there would only be harassing phone calls and harassing text messages, and slightly more serious, fraudulent phone calls”. They did not think it would cause substantial personal harm, so they were not very concerned. Overall, none of the teenagers in the survey had ever experienced a particularly serious privacy breach that resulted in personal injury, so they were not fully aware of the potential safety risks that could result from a privacy breach. Some of them may continue to share their information on the Internet, considering that this is unlikely to happen to them. Also in recent surveys, it was found that teenagers will often share information on their social accounts for convenience. For example, they will habitually set their WeChat username to that of other social accounts such as Little Red Book for better access to their devices. This leads to people trying to find them by typing in their Little Red Book accounts on WeChat, a relatively more private social networking software. Compared to WeChat, Little Red Book is a different kind of social networking software. Compared with Little Red Book, which is more inclined to social sharing platform, WeChat is more inclined toward the software function of “Message” in early society. People use this software more to contact people around us and share more close-to-life content. Therefore, the convenience brought by information sharing is also likely to make teenagers inadvertently disclose their privacy.

### 4.3 Parents' Regulation on Teenagers' Privacy in Social Media

According to the aspect of parents, specific research results have shown that nearly 75% of parents would control their children's privacy in online social media. More precisely, over 21% of parents would control the use of social media through both oral and actions, and almost 53% of parents would monitor social media through orally. Only 3.57% of parents did not care or regulate their kids using social media at all (see Fig. 5 in Appendix). This obvious contradiction between having regulation or not, supports the result this paper get, which is that none of the teenagers in our survey had experienced very serious privacy breaches that resulted in personal harm. Due to the high regulations from parents' side, it helps to build teenager self-awareness towards keeping personal information privately and draw the red line for them in terms of what information that could not be leaked, for example the identification number. Information such as genders or phone numbers are having a high tendency for being revealed. It could be concluded that although teenagers would sometimes love to share their privacy or personal stories in order to make friends online or get attention, but based on their privacy education from parents, it greatly decreases the tendency of self-disclosure in some important points of personal information.

**Table 4.** Questionnaire Data

Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Average	Total
Group A	2.78	3.35	4	3.32	3.62	1.42	3.82	2.16	2.68	3.44	4.08	3.14	3.28	3.96	3.22	45.05
Group B	2.93	3.34	4.2	3.67	4.13	1.12	4	2.28	2.74	3.3	4	2.9	3.28	2.87	3.20	44.76

Suppose that the respondents whose parents of teenagers attach great importance to their privacy are group A, and those whose parents of teenagers generally attach great importance to their privacy are group B. Their privacy anxiety was higher than that of teen respondents whose parents were generally concerned about their privacy. The total score of the group A was 26.46 points, with an average score of 2.940 points. The total score of group b was 25.37 points, with an average score of 2.819 points. Although group A scored higher but did not reach the horizontal line (3 points). It shows that adolescents are not very anxious about privacy. The total score of the adolescent privacy protection behavior group A is 18.69, with an average score of 3.115. The total score of group b was 19.39, and the average score was 3.232. The average scores of both groups A and B are above the horizontal line (3 points). It shows that teenagers have awareness of privacy protection, and their awareness of protection is not low, but not high. The average score of the fourteen questions is 3.22 for group A and 3.20 for group B. Group A is higher, indicating that the more parents pay attention to their privacy, the more teenage users themselves will pay attention to their privacy. Verifies our hypothesis, "Parents' concern for privacy is directly proportional to their children's concerns for privacy". However, at the same time, this data also shows that adolescents' privacy anxiety has nothing to do with adolescents' privacy protection behavior. They are anxious about privacy leaks but do not respond appropriately. On the other hand, they are not worried and anxious about their privacy being leaked, but they will take measures to protect it. However, their anxiety levels and their awareness of protection are all at a moderate level, imperfect, and in urgent need of improvement (see Table 4).

## 5 Discussion

This study explores the influential factors of Chinese teenagers' self-disclosure on social media by proposing and verifying three hypotheses. The survey found that gender differences have a great impact on adolescents' willingness to disclose themselves. The more willing they are to disclose themselves on social platforms, the more their privacy will be leaked intentionally or unintentionally. Girls prefer to share their life and make friends on social platforms and are more willing to reveal themselves on social software. They are more willing to sacrifice some private information to gain social identity, so they are more likely to accidentally reveal personal privacy. Due to physiological reasons and certain social factors, girls are generally more vulnerable to different forms of injury or danger in modern society. The spread of social media transcends time and space, resulting in the explosive growth and dissemination of information. The private information leaked by girls will more easily bring them unknown risks. Some teens worry about privacy intermittently, but they happily share private information. Breaking

such a “privacy paradox” requires the efforts of individual users, operators, and market regulators. Social media users should increase their privacy sensitivity, weigh immediate benefits, current service convenience, and future benefits, and try their best to reduce conscious and controllable privacy leaks. Operators must be more conscious, strictly abide by the law, and weaken capital awareness before privacy issues. Market supervision departments must crackdown on illegal apps strictly and resolutely, promulgate and implement several laws against privacy leakage in the media, restrict the capital market to control teenagers' psychology and government departments need to balance the relationship between privacy and social benefits.

Teenagers' Self Disclosure on the Internet causes a large part of the problem of privacy disclosure, but it is not advisable to put an end to self-disclosure. Self-disclosure is a very important part of teenagers' healthy personalities. Proper self-disclosure and proper privacy exchange are beneficial to the development of teenagers. Li Linying, a domestic scholar, investigated the influence of self-concealment, self-disclosure, coping style, and social support on College Students' loneliness. The results showed that self-concealment, self-disclosure, coping style, and social support were important factors affecting loneliness. She also found that the students who went to psychological counseling had a strong sense of loneliness and low self-disclosure. Privacy protection should be based on raising teenagers' awareness of the privacy crisis, raising privacy concerns, and reducing teenagers' material and spiritual comparisons on the Internet, resulting in more unnecessary privacy leaks.

Society generally believes that the leakage of personal privacy will cause certain anxiety, but the survey results show that teenagers are not very worried about the leakage of personal privacy. They do not think that the privacy breach will have serious consequences, and there is a fluke mentality. Or adopt the idea of “self-defeating”, arguing that in a technological society with more and more developed media, people's privacy has long been transparent, and it is no longer necessary to protect privacy. It is not difficult to see that in a digital society with increasingly developed social media, young people's awareness of privacy protection is far from enough, their understanding of privacy protection concepts is biased, and their ability to protect privacy is still very weak. Further, as usual, that cultural awareness has a subtle influence on people. Parents' attention to privacy is positively correlated with adolescents' own privacy awareness. Moreover, the privacy concept of most teenagers is 90% similar to that of their parents, which is easy to obtain, and parents have an important role in the privacy of teenagers. The formation of teenagers' privacy protection concept should come from systematic and correct guidance from parents and schools. Among them, the private education of parents is the top priority. Friedrich Wilhelm August Froebel, the founder of modern education, believes that parents are the most important teachers for children, and children will imitate their parents' behavior. Therefore, in terms of privacy, parents should not only educate young people to protect their privacy but also set an example to help young people form correct concepts.

And we found that adolescents' privacy anxiety was not directly related to privacy awareness and behavior. Privacy anxiety doesn't make them take many proactive steps to protect themselves. Anxiety about privacy only adds to teens' sense of unease, and this is something that needs improvement. Negative emotional feedback should alert

us to develop bad things. But the good news is that although some teens don't care or feel anxious about privacy breaches, they still take some protective measures. This reflects the changeability of adolescent privacy issues. The guidance and demonstration of parents are a large part of the factors. What teenagers need most is sufficient attention and a correct understanding of privacy issues. Once the correct privacy values have been formed, it is easy to teach them various protections, precautions, etc., and make them accept them.

It is foreseeable that in the future, the problem of privacy leakage among young people will have a deeper development, and the waves of various influencing factors will have a deeper collision.

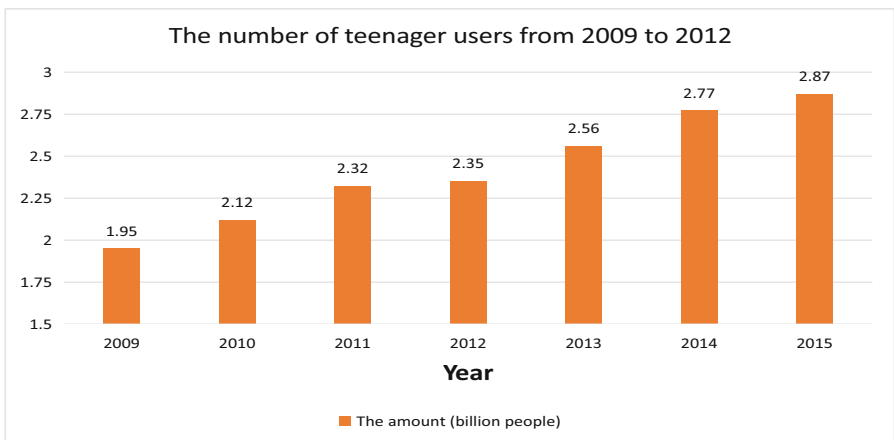
This study also inevitably has some limitations, which are mainly reflected in the sampling method, research design, and research angle. First of all, the questionnaires in this paper are all conducted on the Internet platform, the authenticity and accuracy of the answers are lacking, and the sample size is relatively small. The adolescents in the four developed urban areas of Chengdu, Shanghai, Jiaying, and Shenzhen are the research objects. The survey scope is not wide enough in terms of geographical development, and the sample subdivision is relatively rough, so it is difficult to accurately reflect the particularity of adolescents with different cognitive levels. In addition, this paper only starts from a microscopic perspective on the influencing factors of adolescent privacy leakage, and the macroscopic factors are also far-reaching and worthy of research and discussion. Finally, some correlation hypotheses are proposed in this paper, and more and more accurate quantitative studies are needed to supplement the verification. Although there are many deficiencies in this paper, it also sheds light on the research on privacy leakage of adolescents on social media and establishes real research on privacy issues based on adolescents.

## 6 Conclusion

This research paper is dedicated to investigate and test 3 hypotheses that are the influential factors of teenagers' self-privacy disclosure on social media. Based on the authors' aims of getting both quantitative and qualitative details, the research applied various methods including questionnaires and audio interviews, the result appeared to be relatively different. As the first hypothesis, stating that girls' privacy is easier to leak than boys, is proved by the research data. The frequently use of social medias like Weibo, Bilibili and Little Redbook that would share personal life updates through visual images and audio recording, has clearly demonstrated that young girls have distinct, high preference of sharing their personal informations and make online friends through internet, which means that their privacy are more likely to be dangerously exposed to the outside world than boys do. The second hypothesis is made based on the viewpoint of teenagers' themselves, showing that low percentage of people revealing ID number and family information. The result implies that despite the great enjoyment that social media could offer, the majority of teenagers are good at self-controlling their privacy and pretend to be spreading out or illegally obtained from elsewhere, which is contradict with initial hypothesis, stating that teenagers' awareness of protections are getting weaker and weaker. The last hypothesis of the research is also been proved by the data, which

focused on parents as an important influential factor of controlling teenagers' privacy on social media. The research has shown that teenagers have been influenced a lot either orally or physically by their parents and aware the severe consequences of privacy leakage. Parents' role on privacy protection greatly assists teenagers to form a self protection barrier and have clear awareness of it. Family education have kept teenagers away from suffering privacy leakage, which is a great tendency that deserves to sustain the future generation. According to the conclusions of the analysis data, the following suggestions can be put forward: First of all, the government should introduce more policies on privacy protection, mainly for social media software and online shopping platforms, implement punishment policies, and give warnings to those who want to use others' privacy for benefits. The second, schools should conduct more publicity on privacy protection to enhance teenagers' awareness of privacy protection, such as more open classes and class meetings, popularize methods of privacy protection and events of privacy leakage, and distribute suggestions on privacy protection. More attention should be paid to female users. Additionally, the society should release more information about privacy protection and push the crowd to pay more attention to parents, so as to arouse parents' attention to teenagers' privacy protection. Moreover, for social media software loved by teenagers, it is recommended to review the software background, and prompt the publisher if there is a possibility of privacy disclosure. Lastly, hopping platforms on the Internet need to be strictly supervised. Each merchant must be required to protect customers' privacy and give customers a reassuring shopping experience. Set up complaint reporting measures. If buyers are threatened by privacy disclosure, they can protect their rights and interests through complaint reporting.

## Appendix



**Fig. 1.** The Number of Teenager Media Users From 2009 to 2012 [11]

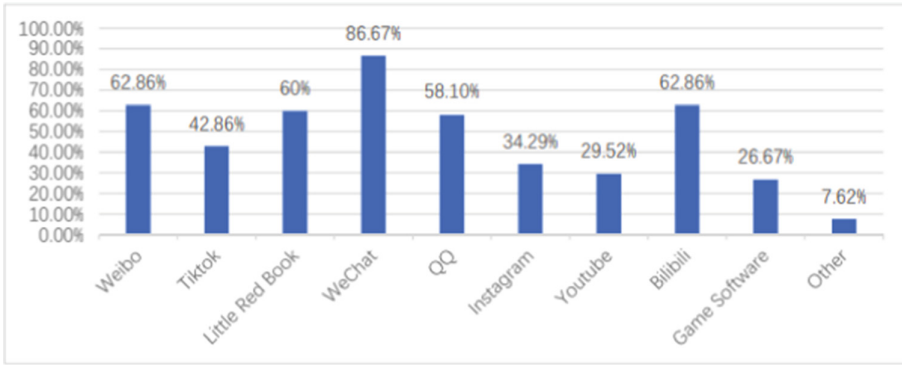


Fig. 2. Most Frequently Used Social Media Software by Teenagers

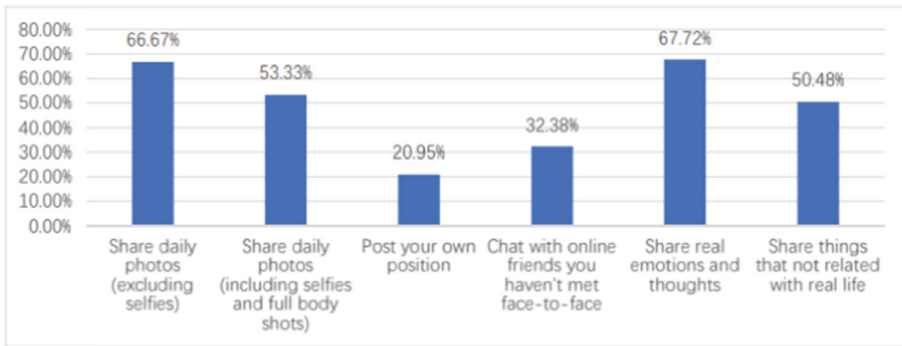


Fig. 3. Teenagers' Likely Behaviors on Social Media

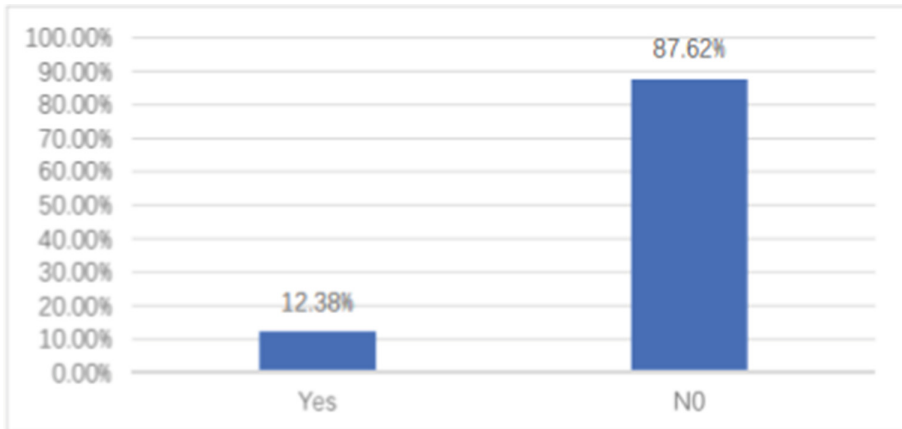
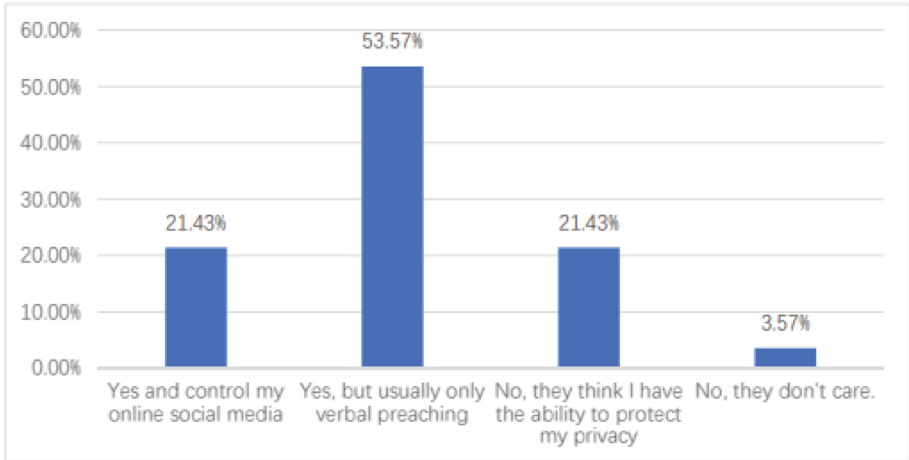


Fig. 4. "Your Geographic Location Has Been Leaked and Whether Makes You Feel Afraid and Anxious"



**Fig. 5.** Parental Influence on Teenagers' Social Media Use

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