

Study on the Spread of Misinformation and Sensitive Information on Social Platforms under Group Pressure and Social Identity

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Abstract. In the era of rapid development of information and technology, social platforms have become an important channel for the public to obtain and disseminate information. However, the spread of misinformation and sensitive information also brings new social risks, with various crises lurking. In response to this phenomenon, this study focuses on the relationship between the spread of misinformation and sensitive information on social platforms and group pressure as well as social identity, while exploring the interactive relationship between the two. By distributing 30 questionnaires to social media users of different age groups and combining the Spiral of Silence Theory and Social Identity Theory, it is found that a certain proportion of users have a herd mentality during information dissemination. Social identity, through users' understanding of their circles and identities, promotes the spread of such information in some scenarios. This study aims to provide new ideas for the governance of network environment security and construct a comprehensive response system covering network governance, implementation of platform responsibilities, improvement of laws, enhancement of technical detection, and cultivation of public media literacy.

Keywords: Social Platforms, Misinformation, Sensitive Information, Group Pressure, Social Identity

1. Introduction

In the era of rapid digitalization, social platforms have gradually become the main force of information interaction. They have improved the efficiency of information dissemination and brought convenience to people's lives. However, at the same time, a large amount of misinformation and sensitive information is also mixed in. Various social media platforms have developed response systems to address this issue, but some even use AI technology to fabricate misinformation to extort the public [1, 2]. The spread of such misinformation or sensitive information related to national policies, health and safety, social consensus, and the shaping of three outlooks (outlook on the world, outlook on life, and outlook on values) will harm the governance of network security as well as public emotions and cognition, thereby triggering relevant public opinions. It spreads rapidly, covers a wide range, and has diversified and complex information sources [3].

This study will use questionnaires to explore how group pressure and social identity play a role in the spread of sensitive information and misinformation, and how these two factors interact with each other to promote information diffusion. It aims to clarify the mechanism of action of the two, further promote network security governance actions, and improve social platform users' ability to identify and remain vigilant so as to reveal the complete closed-loop process of social networks from community formation, and pressure response to structural reconstruction [4, 5].

2. Theoretical basis

2.1. Group pressure and the spiral of silence theory

New media takes emotions as the link and grass-roots audiences as the foundation, forming a spiral effect from bottom to top [6]. The core representative scholar of this theory is Elisabeth Noelle-Nuemann. She believes that when people express their ideas and opinions, if they see an opinion they agree with and it is widely accepted, they will subconsciously be convinced that their own opinion is popular and confirm it as correct and reasonable; on the contrary, they will choose to remain silent and not express their opinions.

2.2. Social identity theory

The core representative scholar of Social Identity Theory is Henri Tajfel. This theory holds that social identity consists of three basic processes: categorization, identification, and comparison. Through these three processes, people enhance their self-esteem and self-worth. The individual's identification with the group is at the core. It is believed that individuals categorize themselves socially, develop identification with their own group, and generate in-group and out-group biases.

3. Research content

3.1. Data collection and analysis

For the theme of this study, a questionnaire titled "Questionnaire on the Spread of Sensitive and Misinformation" was designed. Seven highly targeted questions were formulated regarding the basic behaviors of social platform users, their participation in information dissemination, the driving force of social identity, the perception of group pressure, the investigation of motives, the investigation of the impact of information, and the differentiated perception in different scenarios. Social platform users of different age groups were selected to answer the questionnaire, and 30 valid questionnaires were recovered.

3.2. Analysis methods

This study will sort out the relevant data of the questionnaire through line statistics and reveal users' attitudes and behavioral logic by setting different targeted questions. At the same time, it will also analyze the spread of sensitive information and misinformation by combining the Group Pressure and Spiral of Silence Theory as well as the Social Identity Theory so as to deeply explore the driving mechanism of group pressure and social identity on such information.

4. Research results and content analysis

In this survey, users aged 18-25 accounted for approximately 45%, those aged 26-35 accounted for about 30%, and users over 36 years old accounted for 25%. The average daily online time of users on social platforms is about 6 hours, among which WeChat and Douyin account for a relatively large proportion.

4.1. Exposure to sensitive and misinformation and motives for dissemination behavior

According to the questionnaire, 40% of social platform users reported having "occasionally seen" sensitive information related to national policies, safety and health, and other fields, while 6.67% of users said they had "often seen" such information. From the analysis, it can be seen that although such sensitive and misinformation has spread, it has not yet formed large-scale coverage. The social network as a whole still takes authenticity, timeliness, and security as its mainstream characteristics. In addition, 6.67% of users reported having commented on or forwarded such information 1-2 times. This data indicates that most users basically have the ability to identify sensitive and misinformation. However, there is still a small group of users who engage in dissemination behavior and lack identification ability.

4.2. The impact of group pressure on promoting the spread of risk information

Based on the survey data, group pressure can be divided into pressure from intimate relationships, pressure from community consensus, and mass communication pressure on social platforms.

(1) Pressure from intimate relationships: 86.67% of users will not spread sensitive and misinformation forwarded by family and friends due to "disconnection from opinions," while 13.33% of users choose to "occasionally do so." The data shows that strong relationship circles, such as intimate relationships, do not interfere with the information judgment of most users.

(2) Pressure from community consensus: 76.67% of users will not avoid questioning misinformation in interest communities due to "fear of being isolated," but 10% choose to "occasionally do so" and 13.3% choose to "usually do so." This data indicates that in social scenarios such as interest communities, the spiral of silence effect can play a role on some users, which is reflected in suppressing their own doubts or believing in such sensitive and misinformation, and plays a certain role in promoting the spread of such information.

(3) Mass communication pressure on social platforms: 63.3% of users stated that they will not waver in their judgments at all when they find that most people forward and have consistent comments, 20% of users said they "will not easily waver," and 16.67% of users said they "will usually waver." This data shows that when the group attitude is highly consistent, it will form hidden psychological pressure on some users, thereby interfering with users' independent thinking and judgment mode, and further promoting the spread of misinformation and sensitive information.

4.3. Analysis of the impact of social identity on information dissemination

Through the analysis of the questionnaire, it can be found that users' behavior of disseminating information can be regarded as the recognition of their own identity circle. By disseminating or believing in information that is widely disseminated and supported, they can show their "gregarious" characteristics so as to better meet their own need for a sense of belonging to the group.

4.4. Analysis of scenario differences

According to the question settings and users' answers, 66.67% of users believe that there is no difference in group pressure and social identity among different communities, 13.33% of users think that the impact of "private family and friend groups" is greater, and 16.67% of users believe that the impact of "public platforms" is greater. Through the analysis of the characteristics of different scenarios, it can be found that public platforms have greater group pressure, which is more likely to arouse users' herd mentality, thereby weakening users' rebellious psychology and intensifying the spread of false information.

5. Analysis of the internal logic of group pressure and social identity

Analysis of the driving force of group pressure: Group pressure creates a development space for the spread of various misinformation and sensitive information through the "spiral of silence effect". Due to the herd mentality in their hearts and the urgent desire to obtain the identity recognition of the group, some users involuntarily weaken their own identification ability. Such pressure will further trigger the phenomenon of "passive information dissemination", thereby accelerating the spread of misinformation and sensitive information.

Analysis of the driving force of social identity: Social identity helps users find their own identity anchor. Users are eager to find a sense of belonging in different social scenarios, so they easily recognize the values disseminated by the social group and then take the initiative to participate in the spread of misinformation and sensitive information. This also reflects the process of users from "quasi-sensory statistics-fear of isolation-speaking out loudly" [7].

Interactive effect of group pressure and social identity: Group pressure and social identity show a "mutually reinforcing" characteristic. Group pressure exerts external pressure, and users are forced or voluntarily participate in the information dissemination process under the challenge of external pressure. Social identity, on the other hand, exerts internal pressure, which is reflected in users' own need to obtain the recognition of external groups. The two interact with each other, which is likely to accelerate the process of users' dissemination of misinformation and sensitive information.

6. Countermeasures & suggestions

This study reveals that group pressure and social identity interact and jointly strengthen the spread of sensitive and misinformation by social platform users. It shows the complete closed-loop process of social networks from community formation and pressure response to structural reconstruction. Most users have the ability to identify and the awareness of discrimination, but group pressure and social identity can still continuously affect the dissemination behavior of some users through different aspects.

Therefore, it is necessary to correct the situation for different subjects and maintain a more diverse opinion market to truly build a sound network environment. For social platforms, they should conduct sensitive topic detection for different communication scenarios and reasonably use algorithm technology to identify misinformation and sensitive information; for users, they should better distinguish between "consensus" and "herd behavior" and improve their ability of independent judgment [8]. It is necessary to be alert to the information impact caused by "public opinion reversal" and establish a psychological defense line and dare to break the "monopoly of majority opinions," improve the ability of information judgment, consciously access cross-field and cross-standpoint information, and avoid being coerced by a single viewpoint [9, 10].

7. Conclusion

Preventing and controlling sensitive information and misinformation is a cornerstone for maintaining social stability, a foundation for safeguarding individual rights and interests, and at the same time, a critical bond for maintaining public trust. In today's digital environment, misinformation spreads rapidly through online platforms, often bypassing traditional checks and filters. Such misinformation can subtly weaken the credibility of both government and the media. And in the long run, this erosion of credibility may not only generate confusion but also create widespread cynicism, thereby causing serious and long-term damage to society. By contrast, effective prevention and control mechanisms can ensure a clean cyberspace, provide reliable sources of information, and contribute to the long-term development of society.

Therefore, according to the problems shown in the survey, improvements should be carried out from the following three aspects. At the technical level, major online platforms should build a more complete information prevention and control system, improve the platform identification mechanism, and strictly review various videos produced by AI to prevent users from blindly forwarding them. Secondly, at the institutional level, it is necessary to improve laws and regulations related to the Internet, establish a cross-platform governance mechanism, and increase penalties for malicious fabrication of false information. Finally, at the social level, it is necessary to strengthen media literacy education, encourage the public to actively participate in reporting false information, and enhance the authority of the government, so as to better alleviate the social trust crisis.

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