



Online Group Psychology Transmission Effect of the Doctor Whistle-blower in COVID-19

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ABSTRACT

The epidemic of new-type coronary pneumonia has had a significant impact on the physical and mental health of Chinese people. Under the influence of media, such as the new media, the public's anxiety and fear in the epidemic are also constantly fermenting. Wechat is the mainstream new media in China. This paper analyzes the hot articles and comments on Dr. Li Wenliang Incident happened in Wuhan, China, during the period of pneumonia epidemic in WeChat, to tap the media and the public's focus on this incident in China's network communication. This paper also analyzes the changes of the masses' psychology and behavior in China's network communication, and its mechanism of action. The study finds that in the report of Li Wenliang Incident, the development of his condition and his death were the focus of the report. Mass sentiments in the "Li Wenliang Incident" include anger, sadness, admiration, and disappointment. The main reason that caused the people to have empathy and even emotional outbreaks was their recognition of Li Wenliang's social identity and the situation of the doctors in the period of pneumonia epidemic. Finally, this study summarizes the mechanism of group psychology in network communication events under the background of significant emergencies. Psychological recognition will show group emotions, and will also be affected by panic and anxiety in the environment. Panic and anxiety may not directly affect group behavior, but they will show through other group emotions. What is more, the anonymity of network communication makes groups not responsible for what they say or do. As a result, group emotions can break out, and irrational group behaviors with aggression or resistance occur.

1. Introduction

An accidental event is enough to bring people who resonate together to form a psychological group (Gustave Le Bon, 2006). People in a group use the group as part of their psychological self, and the emotional response to a group-related event or situation is called Group Emotion (Smith, 2007). Group sentiment is the unanimous sentiment shown by most members after being spread by members within the group and is highly contagious (Barsade, 1998). According to the World Health Organization, more than 350 million people worldwide suffered from depression (2019), and about 264 million suffered from anxiety (2015). Sociologists believe that significant events can lead to mental illness. For example, people who experience social movements, wars, or suffer natural disasters or human-made diseases are more likely to suffer from mental illness or adverse mental conditions. In China, the incidence of neuropsychiatric symptoms in SARS patients in 2003 was 53.2%, of which the incidence of anxiety disorders was 20.2%, the incidence of depression was 6.4%, and the incidence of suicidal tendencies was 1.2% (Tang, 2005).

Unconventional major disaster events not only cause the loss of life and property in the affected areas but also bring great mental harm to people throughout the affected areas, usually causing a large number of people to develop a series of stress disorders. The technological revolution has eliminated the distance of social living

space, along with the increase of the popularization and use of network and intelligent equipment, network communication has gradually evolved into a dominant force, providing an excellent hotbed for the venting and spread of group emotions. Today, small events can also stir up public sensitivity nerves and gather a large number of clicks and comments in a short time. Recently, there has been a severe outbreak of new coronavirus pneumonia in China. All-round, transparent reporting of the outbreak on the Internet has instantly aroused national attention. Therefore, it is necessary to understand the change of mass psychology and group behavior in the background of major public emergencies.

This paper focuses on the following research questions:

1. What are the main concerns of the public when disseminating the Li Wenliang event through new media on the Internet?
2. What kind of public sentiment is reflected in the spread of the Li Wenliang event by the new media on the Internet?
3. What changes have taken place in the group's psychology during this event, and how did they lead to changes in the group's mood and behavior?

This study has significant reference value for understanding the mechanism of network event propagation and group psychological changes under major emergencies, for alleviating people's negative emotions when disasters occur, and for effectively conducting psychological counseling for related groups after the disaster.

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2. Literature Review

Existing research explains the mechanism of group behavior from a multi-disciplinary perspective, including (1) political strategies that influence group behavior, (2) the general contextual factors that influence group behavior (Van, 2009); (3) individual psychological responses in group actions. Steve Zhongshi Guo et al. (2005) studied the impact of "fear" emotions on group behavior in major public events, arguing that the knowledgeable information processing of information accessible to media such as the Internet or television newspapers affects behavior at the level of personal and social-emotional response. Fear itself cannot directly drive behavioral change but is the result of cognitive and emotional thinking efforts. There are also studies to explain the reasons for the occurrence of group behavior in the network environment. Gao Wenxuan, Chen Hao (2013) put forward the identity emotion model of collective network action, pointing out that the "identity-evaluation-emotion-action path" is the primary psychological process of collective network action.

Many researchers have investigated group emotions and group behavior in major emergencies from a psychological perspective. According to the World Health Organization, after the disaster, about 20 to 40 percent of the affected people will have mild psychological disorders, 30 to 50 percent of people will have moderate to severe psychological disorders. Within a year of the disaster, 20 percent of people may develop severe mental illness. Studies show that 81.7 percent of people in the U.S. experienced traumatic events, of which 6.8% to 7.8% had PTSD (post-traumatic stress disorder) (Cox, Clara, s. Enns, 2002; Kessler et al., 2005). Within 1 to 2 years of natural disaster, the incidence of PTSD was between 3.7% and 60% (Neria, Nandi, Galea, 2008). Studies by Chinese scholars have shown that the incidence of PTSD in 2009 was 25.8% after Typhoon Morakot caused survivors in the affected areas to be 25.8% (Yang et al., 2011). Three months after the 2008 Wenchuan earthquake, the incidence of PTSD in Beichuan, the worst-hit area, was 37.8% (Wang et al., 2000), while the current incidence of post-traumatic stress disorder among orphans in 22 years after the Tangshan earthquake was 23% (Zhang et al., 2000).

The Internet provides a new way for the spread of group psychology and the change of group behavior, and a large number of researches investigate the mass behavior of the public in network communication. Brendan O'Connor (2004) and others measured how the public's emotional reaction to political events affects public opinion through spontaneous online political commentary during the U.S. military campaigns in Afghanistan and Iraq. Their findings suggest that the public's emotional response to political events helps explain the president's approval ratings during this time. Wang Yue analyzed the different mood changes of the people in the news and blog during the Wenchuan earthquake. Ming lu Li (2008) investigates public panic in posts based on the underlying influence, influence factors, and attitudes of BBS Posts.

Therefore, we can see from the above literature review, after a significant public event, people often appear psychological disorders, the specific performance of anxiety or panic. On Internet platforms, such emotions are also spread, and they linked to public behavior. A large number of researches have paid attention to the mechanism of group behavior and group emotion and group behavior after significant emergencies, there are also studies concerned about the mechanism of action of group emotion and behavior in the network. However, few studies combine the two to explore the causes of group behavior in the network under major public events.

3. Research Methodology

This paper uses Jung's prototype theory and the theory of empathy to study the causes of group behavior in the network under the background of major public events. Jung's archetype theory holds that in human behavior, consciousness plays a weak role and, more importantly, is subconscious. He divides the subconscious into two levels, individual and collective, and thinks that the individual's mind (psyche) consists of three levels of consciousness: the individual subconscious and the collective subconscious and that all conscious and subconscious phenomena are born out of the collective subconscious (C.G., 1971). The collective subconscious is a deeper layer than the individual subconscious. It is universal and regular. It is a common psychological basis of super personality, which pre-exists within each individual's spiritual consciousness, and provides a set of pre-formed forms of individual behavior" (C.G., 1971). The content of the collective subconscious is composed of archetypes (C.G., 1972), which appear in the form of images. The important archetypes of Jung's research include personality masks, shadows, Anima, Anims, self, mother, birth, death, rebirth, power, heroes, babies, etc., and the repetition of the experience of human historical life. So that these prototypes are engraved in the human psychological structure, human beings in all areas of life will encounter narrative. The source of the power of narrative is the typical prototype.

Empathy is an individual's ability to understand the emotions of others accurately and to respond accurately to emotions in a particular situation (Reniers, Corcoran, Drake, Shryane, s.ilm, 2011). Most scholars generally agree that empathy consists of two components: cognitive empathy and emotional empathy (Fan, Duncan, de Greck, Northoff, 2011; Miklikowska, Duriez, s Soenens, 2011). Cognitive empathy refers to understanding the causes of other people's emotional states, which requires some cognitive involvement. Cognitive empathy can help to anticipate the consequences of individual behavior, activate more advanced empathy patterns such as opinion selection, and trigger different directional responses. Emotional empathy refers to emotional responses to other people's emotions, producing emotional experiences similar to those of others, without the need for cognitive participation. Emotional empathy and cognitive empathy are closely related, and they appear with each other. Emotional empathy relies on environmental cues and is influenced by contextual factors (Hoffman, 2001).

We believe that in the network environment (1). group emotions are the expression of group psychology. Group psychology affects group behavior and needs emotion as an intermediary. (2). In the event of a major emergency, the public responds by processing external information, awakening the prototype of the collective subconscious, and finding content that can cause common feelings in the event, and thus reacting (Fig.1). Therefore, this paper studies how group psychology affects group behavior under the background of major public events, taking the network as the medium.

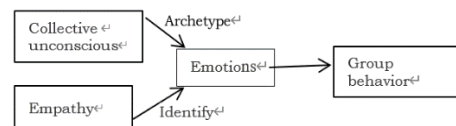


Fig. 1. Research theoretical framework

4. Subject

This study selected the news and comment texts of "Dr. Li Wenliang's Event," which were widely reported in the media during the recent outbreak of pneumonia in China. The large number of users covered by hotly debated texts and comments has allowed events to spread throughout the Internet context. The study is based on data collection by WeChat Public, one of China's most popular self-media platforms in China. Since Tencent launched the WeChat public number feature in 2012, the number

of users has been explosive, with weChat Month active users exceeding 1.1 billion in 2019. As a new type of media, WeChat broadens and deconstructs the media ecosystem, and has strong communication, coverage, and influence in the field of public opinion (Xiang, Sheng, 2019). It has a broad audience but also features timely information dissemination and user interaction (Luo, Wang, 2019).

5. Research Procedures

This study is divided into three stages:

1. The first stage is the stage of an extensive collection of news information to reduce the original nature of the event. WeChat Index is an official WeChat mobile index based on WeChat's big data analytics. Data statistics include WeChat searches, public number articles, and posts that are publicly forwarded by moments. Based on the WeChat index, we visualize the network propagation of Li Wenliang events.

2. In the second phase, we searched for articles before February 13, 2020, on the WeChat platform with "Li Wenliang" as the keyword. We selected the top 30 articles for text processing using The NLPPIR (Natural Language Processing To Information) of Zhang Huaping of Beijing Polytechnic University. Identify and count the keywords in 30 hotly-discussed articles. We use the computer to weigh the importance of text based on the characteristics of word frequency, word length, part-of-speech, location, Internet high-frequency words, and so on, and calculate the characteristic weight of keywords. We sequence the selected feature words (Chen, Xia, Chen, 2019) in descending order to categorize keywords to further clarify the focus issues in network communication, as well as the emotional trends of media communication.

3. In the third stage, using the NLPPIR big data semantic intelligent analysis system, we use the comments in the comments area of the message keyword identification statistics, combing the public's focus on events. Furthermore, with the help of Nvivo to encode more than 300 comments, summarized the group mood and the psychological reasons behind it. First, the emotion is coded, the words with an emotional tendency (first-level coding) are marked, and then the emotions are classified (the second-level coding). In the group psychological coding, we first look for the emotion level coding has a causal association with the words (first-level coding), and then classify the reason (second-level coding), and finally summarize (three-level coding).

6. Findings

Dr. Li Wenliang's experience quickly attracted much attention after it was spread through the network platform. We retrieve information from the Internet and restore the events as follows (Fig.2).

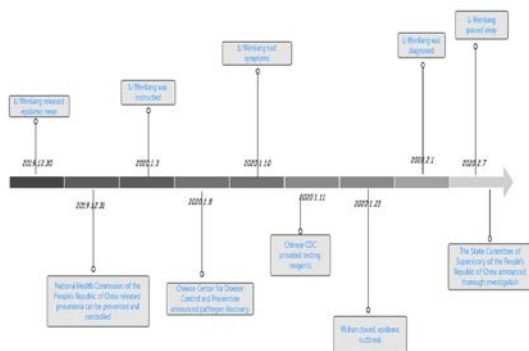


Fig. 2. Timeline of the development of Li Wenliang events
Through the WeChat Index, we visualize the development of

Dr.Li Wenliang Incident network spreading. We selected a vital time node for the development of China's new coronary pneumonia outbreak, searched and collated the WeChat index of "Li Wenliang," "Doctor," "New Coronary Virus," "Epidemic" "Nucleic Acid Detection" and "Anxiety" as the basis for the beginning and end of the event, searched for WeChat index and collated it (Fig.3).

First, Li Wenliang's story began to get public attention after January 23, 2020. After China's official alert for the outbreak, people became aware of the severity of the outbreak and recalled a warning from "whistle-blower" Li Wenliang. As a result, people began to search for information about Li Wenliang, including the "admonitions" he signed, and his family. Second, on February 1, Li Wenliang's diagnosis set off a mass search frenzy, and on February 7, Li Wenliang passed away, and the search volume reached its peak. At the same time, on February 1, the public search for words such as "new coronavirus," "epidemic," and "nucleic acid testing" reached an inflection point. It is clear that Li Wenliang's diagnosis has caused deep public concern about the outbreak, and the level of anxiety remains at a high level. Li Wenliang's experience not only aroused the public's concern for the doctors' group but also brought about a far-reaching impact so that the public continued to pay attention to the interests of the medical community in the epidemic.

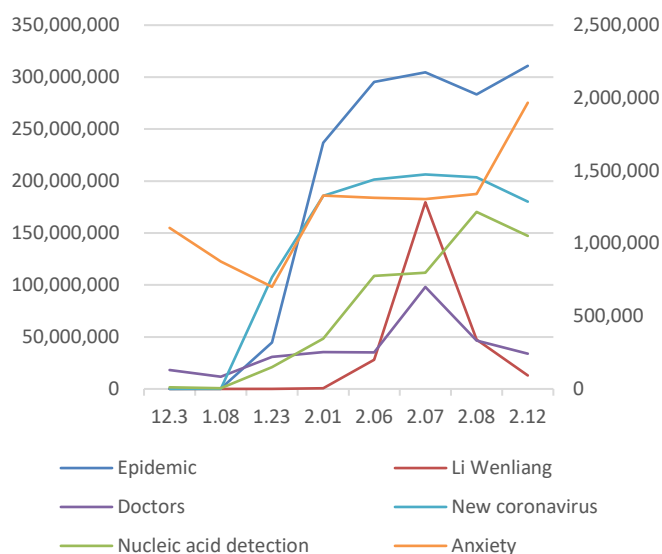


Fig. 3. WeChat index trends of keywords in Dr.Li Wenliang incident

Through the weight analysis function of the NLPPIR big data semantic intelligent analysis system, we analyzed the text of 30 WeChat heated discussion articles. We ranked the top 20 keywords in descending weight order, and it can be shown below (Table 1). The vocabulary related to the three elements of the person, place, and main event in the report are all in the front row. For example, Li Wenliang is ranked 1st, and the National Health And Health Commission of the People's Republic of China is ranked third. Among them, the National Health And Health Commission of the People's Republic of China represents the official and is considered responsible by the masses for the incident. Location: Wuhan, Intensive Care Unit and Wuhan Central Hospital ranked 2nd, 10th, and 14th; Main events: Epidemic prevention and control, infection, outbreak, and coronavirus ranked 4th, 6th, 7th, and 15th respectively. Also, some medical words have higher weights, such as inflammatory storms and nucleic acid tests. It can be seen that in the report of Li Wenliang's incident, the development of his condition and the cause of death are one of the focuses of the report and one of the focuses that caused people to question and discuss

Table 1. Top 20 keywords by weight in report text

Order	Keywords	Weight	Frequency
1	Li Wenliang	191.96	331
2	Wuhan	40.49	64
3	National Health Commission	39.10	79
4	Epidemic prevention and control	37.79	13
5	Inflammatory storm	35.86	90
6	Infection	35.23	27
7	Epidemic	34.61	6
8	Hospital	32.21	152
9	Nucleic acid detection	31.38	17
10	ICU	30.09	30
11	Virus	29.73	131
12	Patient	40.49	119
13	Release	39.10	8
14	Wuhan Central Hospital	37.79	17
15	Coronavirus	35.86	30
16	No	35.23	153
17	Wuhan Central Hospital	34.61	100
18	Appear	32.21	129
19	Work	31.38	32
20	Doctors	23.23	137

Table 2. Top 20 keywords by weight in message text

Order	Keywords	Weight	Frequency
1	Li Wenliang	54.21	64
2	Dr. Li	46.35	79
3	May heaven not	27.33	13
4	Hero	27.29	90
5	epidemic	19.74	27
6	Rest in peace	18.21	6
7	Doctors	17.23	152
8	Wuhan	16.85	17
9	People	16.70	30
10	Healer	16.48	10
11	There is no pain in Heaven	15.64	6
12	Whistle	15.15	10
13	Healing Heart	14.54	4
14	Hope	14.33	37
15	There is no sickness in heaven	13.79	2
16	Nucleic acid detection	12.63	4
17	Virus	12.30	16
18	The truth	11.65	13
19	Salute	11.59	36
20	Should	11.52	9

We analyzed the comment texts of 30 WeChat heated discussion articles through the weight analysis function of the NLPPIR big data semantic intelligent analysis system to reflect the core issues that people are paying attention to when reporting on Li Wenliang's incident. The top 20 keywords in descending order of weight are listed below (Table 2). The data shows that the public has repeatedly emphasized Li Wenliang's social identity in the comments, that is, the words "doctor," "hero," "whistleblower," and "doctor benevolence" to express respect and admiration for the doctor community. At the same time, they also expressed expectations for justice and fairness, and their support and gratitude to the medical groups who dare to tell the truth and dedicated to the people. For example, some commented that Li Wenliang was "the most conscientious doctor" and "the upright young Chinese doctor." At the same time, he expressed his sympathy and condolences for Li Wenliang through words such as "May Heaven have no pain," "Rest of the dead," and "Salute." "People" ranked 9th in weight rankings, and "Truth" ranked 18th. Comments have repeatedly called for a thorough investigation into the truth of the Li Wenliang event and for justice for the people.

We used Nvivo11 to encode and attribute emotions to more than 300 critical news comments to find emotional and psychological changes in groups (Table 3). First of all, the mass emotions displayed by the masses in the "Li Wenliang Incident" include anger, sadness, admiration, and disappointment, and anger is the most important emotion. Secondly, the main reason for the mass emotional outburst is the group's recognition of Li Wenliang's social identity and the situation of doctors in the epidemic. It can be analyzed as follows: ① people got much personal information from Li Wenliang through his social account. He had parents, wife, and children, and his wife is pregnant, which causes the identification of the social identity of the masses; many of his hobbies are the same as those of countless individuals. Therefore, many individuals, after discovering the similarities with Li Wenliang, think that Li Wenliang is right beside them and was a member of the ordinary people. They brought their emotions into society and produced countless "Li Wenliang." They imagined that they were infected with diseases, but they were admonished and mistreated when they released the news of the epidemic. At the same time, their hearts were full of nostalgia for their families, anger, and disappointment for the officials. Also, some people regard Li Wenliang as a friend of his age. As a result, they feel sad about the death of Li Wenliang. ② At the same time, the masses think that although Li Wenliang is an ordinary person, his courage to expose the epidemic is extraordinary. They believed that Li Wenliang was brave, kind, and upright, and did what they could not do - to fight against the "evil forces." Therefore, it also arouses the group's cognition of the "hero" prototype and produces the admiration for Li Wenliang. ③ In this outbreak in China, its sudden and long-term characteristics have a huge negative impact on people's normal life and psychology. The front-line medical staff risked high risk in the hospital and kept saving lives, and a large number of medical staff sacrificed under their posts. The masses will think that under this epidemic situation, medical personnel is also one of the victims. Moreover, doctors help the dying in the front line. Their existence has brought great relief to the anxiety and fear in the group mood and awakened the "hero" prototype in the group subconscious. Therefore, when the medical staff represented by Li Wenliang received unfair treatment, the people thought that their "God of protection" had been blacked, and justice no longer existed. As a result, they are angry and disappointed.

Generic	Classification (number of nodes)	Text case	
Emotions	Anger (69)	1.The Central Leader also gave Dr Li Wenliang a fairness! 2. The oppression makes us feel unusually angry.	
	Sadness (57)	1.Mournful 2.Cried for a while 3. So sad	
	Admire (65)	1.Wish the hero a good journey to heaven. 2.Ordinary greatness 3.Here's to the Heroes	
	Disappointed (16)	1.You want to wake up a pool of stagnant water! But dead water! 2.The contrast is too cruel and the reality is powerless; 3.Tell you the truth...too difficult.	
Group psychology	Identity-based Empathy (34)	Peers, ordinary people, preferences (23)	1.He is a very cute and passionate young man, just like us. 2. Dr. Li is also an ordinary person who likes fireworks on earth like us.
		Father and husband (11)	1.Wish good people a good journey to heaven. Wish the baby a smooth birth. I wish the whole family peace and health! 2. Best wishes for his wife and family.
	Situation-based empathy (62)	Doctors in pneumonia (60)	1.Upright young Chinese doctor! 2.Good doctor of the people, a good journey to heaven! !!
		The first-line personnel in pneumonia (2)	1.Pay high respects to front-line 2.medical staff!

Table 3. Coding result

The behaviors elucidated by the above psychology include a large number of aggressive behaviors: ① denounce the official and condemned the National Health Committee; ② refuse to donate materials for Wuhan Central Hospital. Resistance behaviors include: ① Spontaneously pray for Li Wenliang and his family. ② Praise the contributions of Li Wenliang and the doctor group he represented in the epidemic. The impact of public behavior includes: ① A specialized team of the China National Supervisory Committee went to Wuhan to investigate Li Wenliang's incident. ②The Chinese government recognizes medical personnel who died as a result of public infection with a new coronavirus as martyrs. ③ The Chinese government decided to give the children of medical workers who are struggling on the front line an appropriate mark in their college entrance examination.

7. Discussion

In the context of major public emergencies, groups are often accompanied by anxiety and panic. Therefore, in this situation, the typical image in public opinion evokes the prototype in the collective subconscious. On this basis, the group has cognitive empathy in social identity and also has situational emotional empathy (Hoffman, 2001). This kind of identity will show the group emotion, and will also be affected by panic and anxiety in the environment. Panic and anxiety may not directly affect group behavior, but they will show through other group emotions. Therefore, this paper constructs a group psychological development model to predict group behavior in network communication events under the background of significant emergencies (Fig.4).

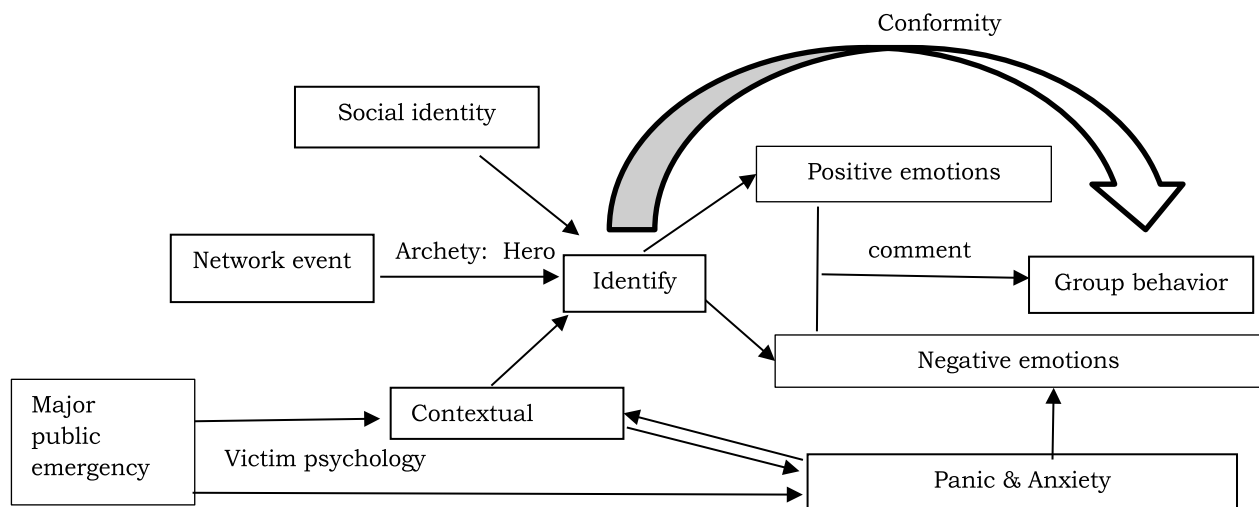


Fig. 4. Predictive model of group behavior and psychology in network new media spreading events

First of all, in major emergencies, the doctor group represented by Li Wenliang is the "hero" prototype of the collective subconscious. Archetype is the innate tendency of a human psychological structure after the typical experience and concept of human being have been abstracted and condensed (C.G., 1972). Jung believes that as many classic events as human beings have experienced, there are as many prototypes. Among many archetypes, hero archetype is the main one. The archetype of heroes comes from myths and legends. Their common characteristic is that they are ordinary in origin, have omnipotent and overwhelming power of evil. Li Wenliang's performance as a hero prototype in the collective subconscious lies in that he is an ordinary doctor who can not only save the dead but also defy the powerful and resist the unjust behaviors. Therefore, psychological projection on the collective level is ubiquitous. The collective subconscious is in an irrational state. When the collective subconscious is activated, the individual is no longer the original individual. When collective unconsciousness accumulates in larger social groups, the result is mass madness, which is a kind of spiritual plague that may lead to revolution, war, etc. (C.G., 1972). Many people can't realize the destructive side of themselves. These elements are suppressed in the subconscious, forming what Jung called the shadow, and influencing individual behaviors in specific situations, such as abusing others or destroying themselves. Those who are unwilling or unable to face their own shadow can easily choose to cast, or even become participants in collectivist movements, which usually have ready-made scapegoats to attack.

Secondly, Li Wenliang's social identity and character make the masses have cognitive empathy. The theory of social identity (Hogg, 2004) holds that individuals distinguish themselves from others by their membership in a community, and assign the characteristics of typical members in the community to themselves, making their characteristics equivalent to Characteristics of typical members of the community. In the age of self-media, people can more and more easily obtain the identity information of the protagonists in public opinion, and use their similar parts to build their own social identity. For example, Li Wenliang's identity of father and husband is consistent with the preferences of the general public. In the display of the online platform, it is easy for countless individuals to find similarities with themselves and thus empathize. After forming the identity of a group, the individual will give the typical characteristics of the group members to themselves, and the identity of the group members will become a part of their self. The existence of this social self enables people to evaluate groups in specific events or situations, rather than their personal significance, thus forming emotions for other groups in events or situations. Moreover, this intergroup sentiment will further guide people's intergroup behavior, such as attack, avoidance, etc. (Scherer, 2001).

Thirdly, the experience of the doctors represented by Li Wenliang in the outbreak caused the group's emotional feelings. In major public events, the daily life and psychology of the group are severely affected, resulting in anxiety or panic and other emotions. Therefore, groups will consider themselves victims of events, consciously classified as vulnerable groups. According to the Relative Deprivation Theory, when people have a sense of relative deprivation, that is, when they feel deprived of some political, social or economic benefits that they should have obtained after social comparison with specific people, they will subjectively form an unfair perception (Wright, 2009). Similarly, in the case of Li Wenliang, many doctors, including Li Wenliang, died in the civil service. They are undoubtedly one of the victims of the epidemic. Therefore, it is a phenomenon of psychological transfer of victims that the public includes doctors in vulnerable groups. The public may not be directly harmed, but when they perceive

that other member of the group have been harmed, they will also have victim Psychology (Daniel, 2009). People are aware of social injustice on the cognitive level, resulting in the sense of deprivation, which will be accompanied by a variety of emotional arousal (Leach, 2002). What motivates people to take part in collective action is the emotion generated by the unfair treatment of their group (Van, 2008).

8. Conclusion

This study traces back to the process of Li Wenliang's incident propagation and development. First, the text and the visual method are used to analyze the hot articles and messages based on the WeChat official account. Then, NLPPIR and Nvivo are used to analyze the focus, emotion, and psychological changes of public concern in Li Wenliang's incident. In the dissemination and report of Li Wenliang's incident, the punishment and treatment he suffered from the official "injustice" have always been the focus of public discussion. Anger, disappointment, sadness, and admiration are the primary group emotions in this incident. The behaviors illustrated by the above emotions include a large number of aggressive and rebellious behaviors. It is found that the sense of identity of collective members is the premise of group behavior, and conformity, infection, suggestive function, and vague responsibility constitute the realistic mechanism of group behavior. The mass is a group of creatures that have been wandering unconsciously, who will keep passion and credulity in all hints at any time, and show indifference to the influence of reason and potential high destructive power (Gustave Le Bon, 2006). In the context of significant emergencies, group panic and anxiety spread through the network platform.

Moreover, the anonymity of network communication makes groups irresponsible for what they say and what they have done. After the network events aroused the prototype of the collective subconscious, the typical characters quickly aroused the recognition of numerous individuals. As a result, group emotions can break out, and irrational group behaviors with aggression or resistance occur. In the comments of the WeChat public account, public managers can filter the public's comments on the incident and then post it on the platform. This feature is called Featured Message. Affected by the WeChat screening function, managers can screen and publish up to 100 comments. This study can only analyze the messages that have been presented, which is the limitation of this study.

References

- Aleksandra J. Borek., & Charles Abraham.(2018). How do Small Groups Promote Behaviour Change? An Integrative Conceptual Review of Explanatory Mechanisms. *Applied Psychology: Health and Well-Being*, 10, 1, 30-61.
- Barsade S G., & Gibson D E. (1998). Group emotion: A view from top and bottom. *Research on Managing Groups & Teams*, (1), 81-102.
- Bar-Tal, D., Chernyak-Hai, L., Schori, N., & Gundar, A. (2009). A sense of perceived collective victimhood in intractable conflicts. *International Review of the Red Cross*, 91, 229-258.
- C .G .Jung. (1971) . " The Type Problem in Psychopathology " , Collected Works of C .G .Jung , Vol.6.2nd ed., Princet on University Press , .p.280.
- C .G .Jung. (1971) . " Symbole of Transformation " , Collected Works of C .G .Jung , Vol.5.2nd ed., Princet on University Press.
- C .G .Jung. (1972) . " The psychological foundation of belief in spirits " , Collected Works of C.G .J ung , Vo l.8. 2nd ed ., Princet on University Press.
- Chen, K., Xia, J., & Chen, Y. (2019).Text Mining of "China STEM Education White Paper" .*Basic Education*, 16 (03): 25-38. (in Chinese).
- Cox, B. J. , Enns, M. W. , & Clara, I. P. (2002). The multidimensional structure of perfectionism in clinically distressed and college student samples. *Psychological Assessment*, 14, 365-373.
- Fan, Y., Duncan, N. W., de Greck, M., & Northoff, G. (2011). Is there a core neural network in empathy? An fMRI based quantitative meta-analysis. *Neuroscience & Biobehavioral Reviews*, 35(3), 903-911.
- Gustave Le Bon. (2006) . The Crowd: A Study of the Popular Mind Cosimo, Inc.,USA.
- Hoffman, M. L. (2001). Empathy and moral development: Implications for caring and justice. Cambridge: Cambridge University Press.

- Hog, Michelle A. "Social Identity, Self-category zoning, and Communicatio in Small Groups." In *Langue Matters: Communication, Culture, and Social Identity*, 221-243. Hong Kong: City University of Hong Kong Press, 2004.
- Kessler RC., Chiu WT., Demler O., & Walters E E. (2005). Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Arch Gen Psychiatry* ;62: 617- 627.
- Leach, C.W., Snider, N., & Iyer, A. (2002). Poisoning the consciences of the fortunate: The experience of relative advantage and support for social equality. In Walker, I., Smith, H.J. (Eds.), *Relative deprivation: Specification, development, and integration* (pp. 136-163). Cambridge, England: Cambridge University Press.
- Li & A. Chen. (2008). "A Web Mining Based Measurement and Monitoring Model of Urban Mass Panic in Emergency Management," Fifth International Conference on Fuzzy Systems and Knowledge Discovery, Shandong, pp. 366-370.
- Luo, X.Y., & Wang, Q.I. (2019). Investigation and Analysis of the Construction of the WeChat Public Account of Guoxue—Taking 60 WeChat Public Accounts of Guoxue as Examples. *Researches in Library Science*, (18): 82-88. (in Chinese).
- Miklikowska, M., Duriez, B., & Soenens, B. (2011). Family roots of empathy-related characteristics: The role of perceived maternal and paternal need support in adolescence. *Developmental Psychology*, 47(5), 1342-1352.
- Neria, Y., Nandi, A., & Galea, S. (2008). Post-traumatic stress disorder following disaster: A systematic review. *Psychological Medicine*, 38, 467-480.
- O'Connor, B., Balasubramanyan, R., Routledge, B. R., & Smith, N. A. (2010). From Tweets to Polls: Linking Text Sentiment to Public Opinion Time Series. *Proceedings of the Fourth International Conference on Weblogs and Social Media*, ICWSM 2010, Washington, DC, USA, May 23-26, 2010. DBLP.
- Reniers, R. L. E. P., Corcoran, R., Drake, R., Shryane, N. M., & Völlm, B. A. (2011). The QCAE: A questionnaire of cognitive and affective empathy. *Journal of Personality Assessment*, 93 (1), 84-95.
- Scherer, K.R. (2001) "Appraisal Considered as a Process of Multi-Level Sequential Checking", in K.R. Scherer, A. Schorr and T. Johnstone (eds) *Appraisal Processes in Emotion: Theory, Methods, Research*, pp. 92-120. New York and Oxford: Oxford University Press.
- Smith, E. R., Seger, C. R., & Mackie, D. M. (2007). Can emotions be truly group level? Evidence regarding four conceptual criteria. *Journal of Personality and Social Psychology*, 93(3), 431-446.
- Steve Zhongshi Guo, Angus Weng Hin Cheong & Chris Fei Shen. (2005). Depth of Reasoning and Information Processing: A Predictive Model of SARS Behavior, *Asian Journal of Communication*, 15:3, 274-288, DOI: 10.1080/01292980500261589
- Van Stekelenburg., Jacqueline, Bertz Klandermans., & Wilco W. van Dijk. (2009). Context Matters: Explaining Why and HOW Mobilizing Context Influences Motivational Dynamics. *Journal of Social Issues*, 65: 815-838.
- Wang X, Gao L, Shinfuku N, et al. (2000). Longitudinal study of earthquake-related PTSD in a randomly selected community sample in North China. *Am J Psychiatry*. 157:1260-6.
- World Health Organization. (2015). <https://www.who.int/zh/news-room/fact-sheets/detail/mental-disorders>
- World Health Organization. (2019). <https://www.who.int/zh/news-room/fact-sheets/detail/depression>
- Wright, S. C. (2009). The next generation of collective action research. *Journal of Social Issues*, 65, 859-879.
- Xiang, A.L., & Shen, Y. (2019). Research on the Optimization Method of WeChat Public Account Dissemination Evaluation Index System (WCI). *Global Journal of Media*, 6 (2): 170-182. (in Chinese).
- Yang, P., Yen, C. F., Tang, T. C., Chen, C. S., Yang, R. C., Huang, M. S., ... Yu, H. S. (2011). Posttraumatic stress disorder in adolescents after Typhoon Morakot-associated mudslides. *Journal of Anxiety Disorders*, 25, 362-368.
- Zhang, B., Wang, X.Y., Sun, H. X. (2002). Investigation of post-traumatic stress disorder in orphans caused by the Tangshan earthquake. *Chinese Journal of Psychiatry*, (02): 46-49. (in Chinese).