

Study on Rational and Irrational Conversion Mechanisms of Mass Incidents

Yuan YUAN\textsuperscript{1, a,*} and Xun YAO\textsuperscript{1, b}

\textsuperscript{1}College of Management, Southwest University for Nationalities, P.R. China, 610041

\textsuperscript{a}9520831@qq.com, \textsuperscript{b}408950405@qq.com

*Corresponding author

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Abstract. Based on the results of research and the relevant knowledge of behavioral economics and prospect theory, this paper constructs a rational and irrational conversion model of individual choice behavior. The research shows that the rational and irrational conversion mechanism of stakeholders promotes the change of life cycle of mass incidents. The study is very meaningful. It is one of the innovations in this paper to put forward the mechanism of rational and irrational conversion, which is a challenge to the Preference for consistency of traditional theory.

Introduction

With the reform and opening up, rapid development have taken place in China's economy and urbanization process. As a result, the most intense collision, contradictions and conflicts between social groups at this stage are fully highlighted. Mass incidents have become the most sensitive social problems, the resulting loss of life and property is immeasurable. Therefore, scientific prevention and reasonable disposal of group emergencies are of vital importance to China's construction of a harmonious society and the modernization process.

The mechanism of rational and irrational conversion of mass contingency participants will influence the evolution of the life events of mass emergencies and the influence of the changes of public opinions on the governance of group emergencies. We believe that combined with public governance theory, in order to prevent and deal with the occurrence of mass incidents in a better way, the solution should be based on government guidance, integration of multi-source governance, supplemented by a group of unexpected events strategy.

Based on the research results and the relevant knowledge of behavioral economics and prospect theory, we firstly construct a rational and irrational conversion model of individual choice behavior, and then study the behavior choice of rational and irrational conversion rule, and finally, combined with the life cycle theory, this conversion mechanism and the combination of the evolution period of the groups ‘unexpected events, the study of the relationship between the groups and the government, the relationship between the key points of the evolution of the emergency and the dynamic decision-making mechanism of the choice behavior.

The Life Cycle Principle of Mass Incidents

Life Cycle Theory

Life cycle theory firstly comes out of ecology. It refers to a series of stages or changes in the form or function of living organisms in the process of life evolution. Life cycle theory is widely used in economic, political, environmental, psychological, social fields and many other areas, a complete life cycle is essentially the things’ birth, growth, aging, death process. The research group collected and sorted out the material of mass incidents, analyzed the characteristics of its development process, found that mass incidents also have a life cycle, which goes from the germination to death.
Life Cycle of Mass Incidents

Based on the previous study, the research group analyzes the characteristics of the occurrence and development of mass incidents, and identify the certain regularity between outbreaks of mass incidents and governance. In the future, we divide the life cycle of mass incidents into four periods: gestation period, occurrence period, developing period, recession and pacification period based on the life cycle theory, as shown in the figure one. The impact of mass incidents is not isolated in the development process, some of the factors act throughout the development process, some factors only apply to one or more stages, such as "trigger event" which acts as the periodic cause of mass incidents, while group awareness of social discontent continues to affect the entire development process.

![Figure 1. Life cycle diagram of mass incidents.](image)

**Gestation period**

During the period of social transformation, along with the economic development and social civilization, series of social problems have taken place, such as corruption and crisis of trust, which arise social discontent and lead to social psychological imbalance. Economic development is accompanied by unemployment, poverty, income gap, widening the gap between the eastern and western regions, environmental problems, the emergence of the relative vulnerable groups and strong groups, the community’s sympathy for the weak, hatred of the existence of psychological. When the demands of disadvantaged groups cannot be resolved reasonably, the contradictions will be accumulating, the risk of social instability will be increasing, and mass incidents are in the run-up.

**Sprouting period**

In this period, the incident occurred mostly for the case, in which the demand is single and the intensity of conflict is not large. Stakeholder’s behavior choice is generally rational, protecting their own interests through legitimate channels. If the relevant government departments at this time are paralysis, did not solve the problem promptly, people will be dissatisfied with the emergence. Stakeholders at this time will post vent their anger through the streets and neighborhoods communication, online expression. At that time, their behavior choices are still rational, but the group is gathering to win the sympathy of the community.

**Occurrence period**

Public dissatisfaction with the government increases, the credibility of the government declines, coupled with some gossip, rumors spread, devoting to the formation of external public opinion, a large number of participants and supporters will gather in the short term. In the case of increasing participants, the individual rational behavior submerged and stakeholders may assembled in succession in the square or the government, sitting at the gate. Before the conflict, relevant
government departments can observe and take corresponding preventive strategies to control the situation.

**Developing period**

Mass incidents escalates, participants increase in a rapid space, even more, the destructive power and influence of the events increases. During this period, the collective consciousness is strengthened, weakening the legal norms, the rationality of the individual was drowned by the irrationality of the group. The behavior of the group changes from meditation, petition and other activities to violent behavior such as smashing and burning, blocking traffic, confrontation with the police.

**Recession and pacification**

With the publication of the truth and the appropriate countermeasures government taken, the contradiction is to ease or resolve. Participants choose to be rational, social order is back to normal again.

**Rational and irrational conversion mechanism of stakeholder's behavior**

Mainstream economics point of view is that personal choice or decision-making always choose to achieve their own utility maximization under certain constraints, the rational choice. Then behavioral economists Daniel Kahneman and Amos Tversky (1979) proposed the Prospect-Theory: when the proceeds are determined, people prefer risk aversion, when the loss is determined, people prefer risk preference, which just illustrates the isomorphism of rational choice and irrational choice in reality.

Le pen believes that individuals are rational, educated and cultural, but as the crowd density increases, individual’s way of thinking and behavior will become more consistent, brutal and irrational. Through investigation and analysis of multiple mass incidents, we found that the individual stakeholders' thinking and choosing behavior in the incubation and sprouting stage of group emergencies is rational. When the problem is not solved in time through legal channels (letters and visits), the dissatisfaction of the stakeholders is often spread through social communication and media, seeking the same ones or similarities, and gaining sympathy and support from the stakeholders through the public. Individuals with common or similar interests aggregate to form groups. When the individual's individuality is affected by the irrationality of the group, the temporary loss or inundation of the individual's characteristics attributes to the loss of the individual's self-monitoring, so they tend to act in an instinctive, anti-rule way. If the legitimate interests of groups cannot be met in time, there may burst outbreak of mass incidents.

From the Shifang event in Sichuan in 2012, months before the incident, some people have reflected the pollution problem of the molybdenum copper project from the official website "window of the Shifang", but there wasn’t a satisfactory reply, then caused the mass petitions on July 1,2012. At the beginning, there was petition only, the relevant government departments persuade them to return with no public commitment of dealing or results, leading to the July 2 sensational nationwide mass incidents.

Through the investigation, the Qidong event in Jiangsu in 2012 is also a rational and irrational conversion of stakeholder behavior choice. On June 9, 2012, the local public had a spontaneous, small-scale peaceful demonstrations, but the local government did not pay enough attention, resulting in greater public rebound, the July 28 large demonstrations, the emergence of people overturned the car, destroyed the computers in city government office.

**The influence of rational and irrational conversion mechanism on mass incidents**

As shown in the figure two, the rational and irrational conversion mechanism of stakeholders promotes the change of life cycle of mass incidents. In the first two periods, the behavior of stakeholders (individuals or groups) is rational, therefore, solving the problem timely and effective is critical. Stakeholders’ satisfaction can prevent the occurrence of emergencies, on the contrary, the dissatisfaction on the government will be gathered. This kind of discontent is infinitely amplified in
a short time by means of mobile phone, computer and other network communication tools, triggering the linkage effect of the whole society. The external constraints (moral, legal and other norms) of the group members to take action are almost nonexistent. The choice of behavior changes from rational into irrational, stakeholders take the irrational confrontation and conflict behavior, leading to mass incidents.

Figure 2. The rational and irrational conversion mechanism on the base of the life cycle.

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