

CRISIS MANAGEMENT ON PRIMARY SCHOOLS IN NANNING UNDER GUANGXI PROVINCE

Cao Kun

เฉา Kun

Leadership in Educational Administration Faculty of Education, Bangkokthonburi University

สาขาวิชาภาวะผู้นำทางการบริหารการศึกษา คณะศึกษาศาสตร์ มหาวิทยาลัยกรุงเทพธนบุรี

e-mail: 616572093@qq.com

Received: February,20 2024

Revised: March,26 2024

Accepted: April,1 2024

Abstract

The objectives of this study were: (1) To investigate the crisis on primary schools in Nanning under Guangxi Province: and (2) To propose the crisis management on primary schools from the prospection of “4R” theory in Nanning under Guangxi Province.

This study was a qualitative research methodology. The population consisted of 18 administrators of The Education Bureau of Nanning, principals of some well-known primary schools in Nanning and some teachers of these schools, including 6 administrative staffs of the education Bureau, 6 principals and 6 teachers. There were certain requirements for the determination of the sample: the management staffs of the education bureau must have more than three years of work experience; The principal must also have more than three years of working experience, and the school should have more than 1,000 teachers and students. Teachers must also have more than three years of teaching experience. The sampling method was based on the schools in different areas of Nanning city, which was obtained by purposive sampling method. The statistical data used for data analysis were descriptive statistics and content analysis.

The research findings revealed that: (1) The crisis on primary schools in Nanning under Guangxi Province consisted of traditional offline teaching and management were facing profound challenges, and crisis management has become the main problem to be solved; and (2) The 4R crisis management theory had important for studying the current situation of crisis management in primary schools in Nanning.

Keywords: Crisis Management, Primary School, Nanning

1. Introduction

The outbreak of COVID-19 in 2020 has had a significant impact on China's education, especially primary education. The Chinese government, from the Ministry of Education to the Education Department, and then to the Education Bureau, has continuously introduced relevant response policies and strategies due to changes in the epidemic. Mizrahi, S., Vigoda-Gadot, E., & Cohen, N. (2021).

Among the objects of influence of these policies and strategies, primary education was undoubtedly the most concerned and the most controversial in society. This was because after the outbreak of the epidemic, the traditional basic education model was completely interrupted, and new education management models were not attempted and explored, exposing various problems.

Among them, there were many problems in primary education in the face of school suspension, online teaching, family communication and so on. In a way, the emergence of these problems was the problem faced by China's primary education at the level of crisis management. Although, from the perspective of management, each school may have different management methods and models due to its own development environment and conditions. Alanezi (2021).

However, primary and secondary schools in China were under the unified administration of the Ministry of education, and their institutions, personnel allocation, selection, teaching content and teaching mode were basically the same. However, there were still some differences in specific operation levels, such as teaching methods, emphasis on teaching contents, specific personnel allocation and so on. In particular, China was a multi-ethnic country. There will be certain differences in teaching contents, methods and even teaching policies in areas where many ethnic minorities live in concentrated communities. Brinkmann, J. L., Cash, C., & Price, T. (2021). Therefore, this paper takes Nanning, a city represented by ethnic minorities, as the object, and takes the construction of primary education crisis management in this city as the research goal, so as to understand and understand the mode and strategy of primary education crisis management in China.

2. Research Questions

- (1) What were the crisis on primary schools in Nanning under Guangxi Province?
- (2) What were the crisis management on primary schools based on “4R” theory in Nanning under Guangxi Province?

3. Research Objectives

- (1) To investigate the crisis on primary schools in Nanning under Guangxi Province.
- (2) To propose the crisis management on primary schools in Nanning under Guangxi Province.

4. Research Method

4.1 Research Design

The research was the qualitative research. Based on the research objectives, there were three processes of research which were research proposal preparation, research procedures, and research report. The research procedures consisted of three steps; (1) Determining the concepts of crisis management from review of literature, and related research; (2) Investigating the crisis on primary schools in Nanning under Guangxi Province; and (3) Proposing the crisis management on primary schools based on 4R theory in Nanning under Guangxi Province.

Moreover, in each of these three steps, practical operations were mainly carried out from the aspects of research design, Instruments, key information, data collection, and data analysis during the specific execution process.

4.2 Population and Sample

The data collected by the researcher mainly come from three parts: the administrators of Nanning Education Bureau, the administrators of famous primary schools in Nanning, and the teachers of these schools. The criteria for selection by purposive sampling method were as follows: the professional age of educational management workers shall not be less than 5 years, the work experience of primary school administrators shall not be less than 5 years, and the teaching experience of teachers working in the frontline of education shall not be less than 5 years.

Among them, the concept of crisis management and the crisis situation faced by Nanning primary schools were important information that we need to collect. In addition,

in the face of various crisis, the responses measure taken by Nanning Primary School were also an important part of the information.

4.3 Research Instruments

The researchers used semi-structured interviews, observations, notes, and other forms of performance as tools, and borrowed equipment such as flip charts, note taking devices, and recording pens for the performance. Among them, the semi-structured interview questionnaire was designed by drawing on mature relevant questionnaires, meeting the research requirements and obtaining expert recognition.

4.4 Data Collection

The data collection of this study is mainly conducted through semi-structured interviews, where the design of the interview questionnaire is divided into two main parts. The first part is an objective and optional question, mainly focusing on the individual situation of the respondents, such as age, occupation, ethnic background, education level, etc; The other part is about subjective openness, which is basically guided by the core ideas of 4R crisis management.

According to the effective feedback, this paper conducted a pre interview before the formal interview, and modified and improved the interview outline based on the effect of the pre interview. The interview in this paper was conducted by combining online and offline methods such as video. The duration of each interview was controlled within 25 minutes, so as to obtain detailed and accurate information. After obtaining the consent of the other party, record the interview for subsequent transcription. For some oral expressions, word processing shall be carried out first, and then the transcribed content shall be sent to the interviewee for confirmation, so as to ensure that the meaning of the interviewee was ready to be conveyed and improve the credibility of the interview data.

4.5 Data Analysis

In the data collection and analysis process, we use Nvivo, a software suitable for qualitative analysis. It can effectively analyze various types of data, such as text, images, audio recordings, and video recordings, and was an effective tool for achieving qualitative research. Due to our use of the "grounded theory" research method, it is a theoretical research method that establishes substantive theories based on data.

we have designed a three-level encoding for all collected data, which categorizes and encodes the language and text of interviews using statistical principles and methods.

The coding design was based on density clustering and word class meaning similarity classification methods, which sort and summarize important vocabulary in the text recorded by interviewees, and use software functions to generate relevant analysis graphs to complete the established relevant analysis. Considering the accuracy issues of some data (word expression) during the Nvivo software generation process, the coding settings still need to be manually assisted. In addition, this article also uses EXCEL for graphical and quantitative analysis of some data statistics. For example, when analyzing the objective situation of the subjects (interviewees), Excel's data chart analysis was used.

5. Research Results

The research results were presented in 3 sections:

5.1 Section 1 Result of Content Analysis on Variables of Relevant Information of Interviewees.

From the relevant information collected from the respondents, it can be seen that the schools involved by the 18 respondents basically cover the main urban area of Nanning City. The age of the interviewee ranges from 27 to 60 years old. Among them, the age of the teacher group was mainly between 25 and 40 years old, while the age of the school leaders was between 30 and 60 years old, while the age of the managers of the Nanning Education Bureau was between 40 and 60 years old. From a professional perspective, whether teachers, principals, or education bureau managers, they all had rich teaching and management experience. Most teachers and school leaders had teaching experience in multiple courses and management experience in managing multiple schools. Therefore, the conditions of the interviewees meet our research requirements.

Regarding the questionnaire design of interview content, we have drawn on the mature design schemes of relevant survey questionnaires from multiple researchers in recent qualitative research projects related to crisis management and education management. For example, Savilides et al. raised thirteen open-ended questions around the nature, preparation, evaluation, response, and recovery of crisis management in a survey of crisis management in Greek secondary schools. (2015); Lina Kaminskienė, et al. conducted a single, multiple, quantitative, and subjective classification method for interview questions in a project on responding to epidemics and school lockdowns by school principals in Lithuania (2021); Este, Sondra (Sandi) proposed 16 related concepts related to

Armed intruders, Bomb attacks, Suicide, and others in their crisis planning research on establishing sustainable school community relationships (2013); There were also 15 interview questionnaires designed by Thelma Cole in his doctoral thesis Evaluation of Crisis Management Plan: An Analysis of Primary Schools in Jamaica, focusing on warning signs, perception, response, readability, and other related content.

In view of the questionnaire survey classification methods used in the above qualitative studies, the design of the survey interview questions in this paper was basically based on the classification design of fixed item selection, quantitative selection and open-ended (subjective) questions (Table 4.1).

Table 4.1 Classification and statistical analysis of questions in the interview questionnaire

In summary, the project research is centered around the "4R theory" of crisis

| Content Serial number | Sort | | Percentage |
|--------------------------|-----------|--------------------|------------|
| 1,2,3,4,5,6 | personage | Objective problem | 30 |
| 7,8,9,10 | school | | 20 |
| 11,12 | Reduction | Subjective problem | 10 |
| 13,14 | Readiness | | 10 |
| 15,16,17,18 | Response | | 20 |
| 19,20 | Recovery | | 10 |

management, combined with the research method of "grounded theory", and designed a three-level coding for interview data. In the end, we learned from the interviewees the real situation of crisis management in basic education in Nanning City. The content of these interviews, after systematic sorting, classification, and induction, formed data that is true and effective, and meets our research requirements.

5.2 Section2 Result of Data Analysis for Research Objective 1

The results of the research objective 1 in this part was derived from the results of the questionnaire survey. Interview data statistics of 16 education related workers from 9 primary schools and 2 education management departments in Nanning City. We will present the research results of Goal 1 from three different levels of coding.

1) Statistical analysis of coding data at **the first level****Table 4.2** Analysis of the total number of crisis management nodes data (level 1)

| | Reduction | Readiness | Response | Recovery | total |
|------------------|-----------|-----------|----------|----------|-------|
| teacher | 68 | 18 | 61 | 11 | 158 |
| school leaders | 60 | 19 | 82 | 38 | 199 |
| Education Bureau | 68 | 27 | 80 | 65 | 240 |
| summary | 196 | 64 | 223 | 114 | 597 |
| Percentage | 32.83% | 10.72% | 37.35% | 19.10% | |

In the analysis of Nvivo software, we used the "Grounded theory" to encode the interviewees' information. There were 597 nodes in the third-level coding, and 4 nodes in the first-level coding, namely, crisis reduction, crisis prediction, threat response and crisis recovery. Among them, the total nodes of crisis response and crisis reduction were higher, which were 223 and 196 respectively, accounting for 37.35% and 32.83%, and the whole has accounted for more than 70% of the summary points. The number of nodes in crisis recovery was relatively low, the total number was 114, accounting for 19.10%, 5.90% lower than the average, while the sum of points in crisis preparation was the lowest, only 64, accounting for 10.72%, 14.28% lower than the average. It can be seen that in crisis management, the nature of the crisis (crisis reduction) has received more attention and recognition. However, it was not difficult to find that the three groups' understanding of A2 crisis preparedness was relatively weak compared with the other three aspects, and there were obvious deficiencies.

Generally speaking, teachers obey the arrangement, pay more attention to the specific phenomena, things and events in teaching and life, and rarely look at some problems from the perspective of management. Education bureau managers were more from the perspective of the entire primary education in Nanning city, taking into account the various aspects of the crisis, so that the number of nodes was the highest. On the one hand, school leaders need to implement the policies and strategies from the higher education department, and on the other hand, they need to reasonably arrange methods

and means according to the actual situation of the school, and strive to achieve the best of the school. This may be the main reason for the difference of coding nodes among the three groups.

2) Statistical analysis of coding data at **the second level**

All secondary coding node data statistics have evolved from tertiary node coding, mainly through various relationships between tertiary nodes, such as "causal relationship", "similarity relationship", "structural relationship", "semantic relationship", "time relationship", "functional relationship", etc., to develop secondary coding nodes. Natural disasters such as "earthquake", "flood", "fire" in the third level code can be attributed to "natural events" in the second level code through "similarity relationship"; We can incorporate the concepts of "human and non human", "natural and non natural", "controllable and uncontrollable", "long-term effects and short-term reactions" related to crisis cognition into the category of "crisis nature" in the secondary coding through "structural relationships"; Some "learning difficulties", "high pressure", "slow communication" in crisis response can be classified into the secondary coding range of "problem occurrence" through "causal relationship", and so on.

Table 4.3 Analysis of Secondary Coding Nodes for **4R** management (level 2)

| Reduction (level 2) | | | | | | | | | |
|--------------------------------|---------------|---------------|-----------------|-------------------|-----------------|---------------|-------|---------|--------------------|
| category | natural event | social events | health incident | school management | personal safety | Crisis nature | Total | average | standard deviation |
| teacher | 17 | 1 | 12 | 7 | 12 | 19 | 68 | 11.33 | 6.02 |
| school leaders | 5 | 3 | 9 | 14 | 9 | 20 | 60 | 10.00 | 5.66 |
| Education Bureau Administrator | 12 | 6 | 8 | 16 | 6 | 20 | 68 | 11.33 | 5.25 |
| total | 34 | 10 | 29 | 37 | 27 | 59 | 196 | 32.67 | 14.57 |
| percentage | 17.35 | 5.10 | 14.80 | 18.88 | 13.78 | 30.10 | | | |

| Readiness (level 2) | | | | | | | | |
|--------------------------------|---------------------|-----------------------|-----------------------|--------------------|-----------------|---------|--------------------|--------------------|
| category | crisis judgment | Training and learning | practice protection | awareness campaign | total | average | standard deviation | |
| teacher | 6 | 6 | 3 | 3 | 18 | 4.50 | 1.50 | |
| school leaders | 9 | 7 | 0 | 3 | 19 | 4.75 | 3.49 | |
| Education Bureau Administrator | 10 | 11 | 3 | 3 | 27 | 6.75 | 3.77 | |
| total | 25 | 24 | 6 | 9 | 64 | 16.00 | 8.57 | |
| percentage | 39.06 | 37.50 | 9.38 | 14.06 | | | | |
| Response (level 2) | | | | | | | | |
| category | There was a problem | solution | Mechanism established | coping with change | personal status | total | average | standard deviation |
| teacher | 3 | 8 | 23 | 21 | 6 | 61 | 12.20 | 8.18 |
| School leaders | 19 | 4 | 29 | 26 | 4 | 82 | 16.40 | 10.63 |
| Education Bureau Administrator | 11 | 14 | 31 | 21 | 3 | 80 | 16.00 | 9.47 |
| total | 33 | 26 | 83 | 68 | 13 | 223 | 44.60 | 26.46 |
| percentage | 14.80% | 11.66% | 37.22% | 30.49% | 5.83% | | | |
| Recovery (level 2) | | | | | | | | |
| category | manage ment mode | Degree of recovery | education | social connection | ideology | total | average | standard deviation |
| teacher | 2 | 6 | 1 | 0 | 2 | 11 | 2.20 | 2.04 |
| School leaders | 9 | 8 | 12 | 4 | 5 | 38 | 7.60 | 2.87 |
| Education Bureau Administrator | 18 | 14 | 24 | 6 | 3 | 65 | 13.00 | 7.69 |
| total | 29 | 28 | 37 | 10 | 10 | 114 | 22.80 | 10.91 |
| Percentage | 25.44 | 24.56 | 32.46 | 8.77 | 8.77 | | | |

From the data statistics of crisis **reduction**, it can be seen that the number of nodes in the three types of groups is basically the same, indicating that the three types of groups have a certain understanding and cognition of the nature, characteristics, forms, and other aspects of the crisis. Overall, they are able to express their views and insights more clearly. From the standard deviation perspective, all three groups of people have a tendency to recognize certain crises, such as having a greater understanding of the nature of the crisis. However, school leaders and education bureau managers have paid more attention to school management, and teachers have a significantly higher level of attention to students' personal safety than the social nature of the crisis.

From the data statistics of **Readiness**, its node is the lowest among the so-called crisis management levels. Among them, the practical content of crisis preparation was the weakest, with a node percentage of only 9.38%. Crisis assessment and training learning are more prominent, with node percentages of 39.06% and 37.50%, respectively. In terms of awareness promotion, they are only slightly lower than the average by 0.94%. This situation should be closely related to the domestic epidemic prevention and control in China in the past three years. Because China has been in a long-term state of epidemic prevention and control in the past three years, often in the process of crisis response and handling, the weak crisis preparedness may also reflect some problems in the entire crisis management.

From the statistical data of **Response**, it can be seen that the overall number of cognitive nodes is relatively high, indicating that everyone's focus on crisis management is mainly on this level. Among them, the establishment of relevant mechanisms and response to changes are the main contents of crisis response, which shows that everyone basically attaches great importance to the role of management. Furthermore, coping with change was directly related to crisis emergence. Therefore, the number of nodes in these two aspects has accounted for 67.71% of all nodes. In addition, the occurrence and solution of problems are directly related to the response to the crisis, so they also have a certain number of nodes. The personal status reflects the situation of the individual when the crisis occurs, which was somewhat different from the overall situation of the crisis response. So the relative node data was low.

From the data statistics of **Recovery**, the total number of nodes in crisis recovery was at a medium level. However, in the three groups of teachers, school leaders and administrators of education bureau, there was a different range of cognition, that was, from

teachers to school leaders to administrators of education Bureau was a gradually expanding trend. From the perspective of the second-level coding data, the nodes of education, teaching, management mode and recovery degree are relatively sufficient, with a node percentage of 32.46%, 25.44% and 24.56%, respectively, while the social correlation and ideological consciousness are relatively weak, with a percentage score of 8.77%

3) Statistical analysis of coding data at **the third level**

The node data of the three-level encoding comes from the interview content of the interviewees, which is closely related to the language and text discrimination in China. The Chinese language is extensive and profound, often with multiple meanings for one word. This also leads to the fact that in many cases, the content of third level nodes often has a certain degree of intersection and multiplicity. Therefore, we basically use the meaning of word changes in one second level node, which no longer appears in other nodes, thus avoiding the problem of repetition in data statistics.

Due to the large amount of data in three-level encoding, We will mainly analyze the relevant data from the high-frequency words in 4R management of three groups.

Table4.4 High frequency node statistics of the third level coding nodes in "4R" crisis management (more than 50% of the third level nodes)

| Reduction | percentage | Readiness | percentage | Response | percentage | Recovery | percentage |
|---------------------|------------|----------------------|------------|-------------------------|------------|------------------------|------------|
| Earthquake | 55.56 | Difficult (predict) | 55.56 | Coordination | 83.33 | Educational management | 50.00 |
| Food safety | 50.00 | raining and learning | 88.89 | Personal hygiene habits | 50.00 | | |
| Epidemic | 66.67 | | | Social institutions | 66.67 | | |
| Behavioral conflict | 50.00 | | | Online and offline | 55.56 | | |
| Different | 66.67 | | | | | | |

From the above table, we can clearly see that primary schools in Nanning pay more attention to phenomenal situations when facing crises, such as epidemic, food safety, force majeure natural disasters (earthquakes), etc. In addition, confrontational events on campus were also major crisis situations. People still had a clear attitude towards the causes of crises, that was, the causes of crises were different, and the consequences may also be different.

From the perspective of crisis preparation, response and recovery, in the whole process of crisis prevention, response and resolution, Nanning primary schools obviously lack confidence in crisis prediction, so they always emphasize cultivation and learning. At the same time, when dealing with crises, there was a clear emphasis on the coordination and cooperation of social resources. In addition, the emphasis on personal hygiene habits and online and offline response behaviors was clearly closely related to the epidemic prevention and control situation in China in recent years. Finally, in terms of crisis recovery, only the attention of education management also reflects the fact that there was a single evaluation standard for crisis recovery in the management of primary schools in Nanning. Of course, focusing on education management itself was not inappropriate, but we must recognize that education management in the crisis recovery process was not an abstract or empty language. It must be fully understood and evaluated for the occurrence, response, and results of the crisis before correct and effective improvements can be made to education management.

Summary: The main types of crisis faced by primary schools in Nanning

Because of the different classification criteria, the types of school crises were also varied. According to the data analysis of this paper, the more common and prominent crisis events in the performance of primary schools in Nanning were the following categories.

1) Sudden disaster crisis

It mainly consists of two kinds of crises of different nature. One was the campus crisis caused by natural disasters, such as earthquake, lightning strike, flood, wind disaster, fire and so on. One was a school crisis caused by social disasters, including food poisoning, house collapses, and infectious disease epidemics (such as COVID-19). The outstanding performance of this kind of crisis was that the outbreak time was short, the harm was great, the normal education, teaching and management order was strongly disrupted, the life and

property of schools and teachers and students were brought huge losses, the social repercussion was strong, and the management was also the most difficult.

2) Management decision-making crisis

A crisis caused by poor decision making or mismanagement by school administrators. Such as organizing open days at school Failure to correctly estimate school attendance, resulting in overcrowding, frequent conflicts, or subsequent reactions to mishandled crisis management. This kind of crisis was often found once the problem, timely adjustment, you can control the subsequent negative impact to a certain extent.

3) School reputation crisis

A crisis that had a negative impact on the image and reputation of teachers, students or a school. As promised by the school leaders at the parents' meeting Become a reality; The problem of arbitrary school charges; School enrollment had plummeted due to a variety of students; School leadership style of life problems, teachers corporal punishment students.

4) Campus management crisis

It refers to the daily teaching activities and life exchanges in the campus, between students, between teachers and students, between teachers and so on Some conflicts and contradictions of students, at the same time, also include students during the study due to truancy, absenteeism and other situations, there were accidental injuries of students and so on. The occurrence of such crisis events was often trivial and easy to be ignored. But once it happens, the impact on the school was very bad.

In addition, there were such as environmental safety inside and outside the school, traffic safety, fire safety and food safety, etc., were possible causes of crisis. All in all, the uncertainty of the crisis makes severe demands on school management.

5.3 Section 3 Result of Data Analysis for Research Objective 2

4R crisis management stage corresponds to the development law of all crises and was applicable to crisis management in all fields. The same was true of the school as an organization in crisis management. From the perspective of each stage of the theory, the main task of the reduction stage was to prevent all possible factors of crisis and reduce the impact on the school after the crisis. For schools, it mainly improves the crisis awareness

and crisis cognition ability of teachers and students and school administrators; In the preparatory stage, the main task was to establish the school's various risk assessment work, strengthen training, learning and exercise; In the reaction stage, the school needs to attack in time, respond actively, and coordinate various resources to prevent further deterioration of the situation; In the recovery stage, because the crisis events make the school inevitably suffer some negative impacts on personnel, property and other aspects, it was necessary to take psychological crisis intervention, response measures feedback, crisis situation investigation, assessment and summary, and finally return the school to normal education and teaching order.

Table 4.5 4R Cross comparison between theoretical model of crisis management and secondary coding

| 4R | Essential element | Secondary coding |
|-----------|---------------------------|---|
| Reduction | Crisis cognition | Nature of crisis, personal safety, natural events, social events, health events |
| | Risk management | School management |
| | Organizational quality | School management |
| Readiness | Crisis management team | |
| | Crisis warning system | Crisis judgment, awareness propaganda |
| | Crisis management plan | Practical protection |
| Response | Training and exercises | Training, learning, awareness |
| | Crisis judgment | Problems arise, solutions |
| | Crisis isolation | Coping with change, personal status |
| | Crisis management | Cope with changes and establish mechanisms |
| Recovery | Crisis elimination | solution |
| | Crisis recovery plan | Management mode |
| | Crisis recovery operation | Ideology, social relevance, education and teaching |
| | Crisis transformation | Ideology, social relevance, management model |
| | Crisis assessment | Degree of recovery |

As can be seen from the figure, almost all the data codes collected by the research covered the basic elements of 4R crisis management. However, only the construction of the crisis management team does not had a corresponding second-level coding node. This also shows that in the crisis management of primary schools in Nanning City, the most urgent was the establishment of crisis management team.

In general, the 4R model in school crisis management had the following advantages: 1) Establish a crisis control system of early warning crisis, rapid response, recovery and summary; 2) The 4R crisis management model with reduction as the core reveals the essence of crisis management; 3) This model can refine the school crisis management into operational steps and carry out planned responses at various levels; 4) Paid attention to various factors such as crisis events and crisis handlers, which was in line with the reality of school crisis management.

From the basic framework of the 4R crisis management model mentioned above, crisis preparation, crisis response, and crisis recovery are essentially a cyclical process of crisis generation, processing, and disappearance (transformation). Crisis reduction runs through the whole process, constantly influencing and adjusting the policies and strategies of crisis management with real-time cognition and assessment. (Figure 4.1)

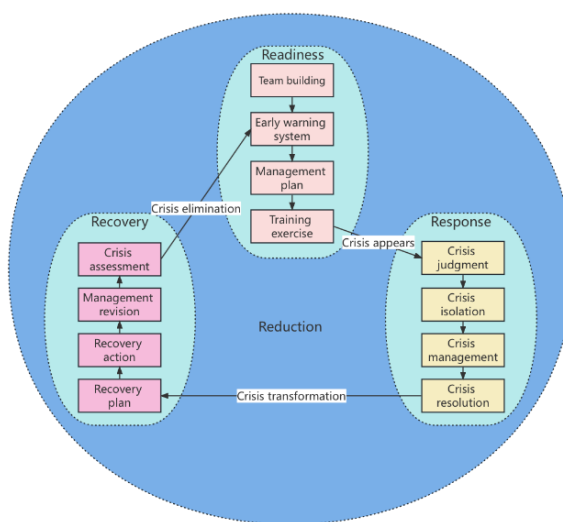


Figure 4.1 Nanning Primary School Crisis Management Model

Therefore, for the crisis management of primary schools in Nanning, we put forward the following 10 suggestions, which are as follows:

- 1) Dialectical crisis analysis was an important means of crisis cognition.
- 2) Crisis awareness was a prerequisite for crisis management.

- 3) The establishment of a dedicated crisis management team was the first step in crisis management.
- 4) Crisis judgment can be improved through training and learning.
- 5) Crisis management requires efficient coordination of social resources.
- 6) The establishment of a crisis management system was the driving force for maintaining the long-term and effective development of crisis management.
- 7) The crisis assessment and evaluation system directly affect the formulation of crisis plans.
- 8) China's crisis management should appropriately consider the existing administrative management system factors.
- 9) The cultivation and promotion of crisis management talents should not be limited to any particular format.
- 10) The construction of a crisis management system requires continuous exploration and improvement in long-term practice.

6. Discussion

The discussion will be presented as follows:

6.1 Discussion about major findings of objective 1

There were four components of Crisis Management which consisted of Reduction, Readiness, Response and Recovery. The major findings were revealed as such because among the total number of coding nodes, crisis preparedness was the lowest, with only 64 nodes, a percentage of only 10.72%. From the statistical analysis of crisis recovery three-level coding nodes, we can also see that the number of coding nodes for crisis assessment was only 6, and the percentage in the crisis recovery summary points was only 0.05%. However, from the model of 4R crisis management, we can easily see that crisis preparation was the foundation of the crisis management model. It was from the data analysis that we can see that the crisis management of primary schools in Nanning lacks the awareness of crisis preparation, which leads to the serious lack of crisis management system of primary schools in Nanning. Especially from the cross comparison between the 4R crisis management theoretical model and the secondary code, Nanning primary schools completely lack the cognition of the crisis management team in the crisis preparation, which may be the root cause of the weak crisis management system.

This research finding was in accordance with the theories or research of Author Lin Zhou and Liang Pei Hua which was found that the establishment of specialized institutions for crisis management in primary and secondary schools was the most important factor. Also, the findings were in the same direction with Researcher Cole (2016), they all emphasized the importance of continuous and effective crisis management planning and design, and that crisis management plans should be regularly updated, modified, and improved. Moreover, from the research of Researcher Ozkayran, S. E., & Yetis, A. A. (2020). regarding crisis guidance services, it was found that the importance of Guidance Services and Guidance Advisors in Crisis Management about training on crisis intervention and crisis management teams. However, it was found that Crisis was emotional and unpredictable, which was different Other researchers' perspectives.

6.2 Discussion about major findings of objective 2

The major findings were revealed as such because many problems in the crisis management of primary schools in Nanning had been discovered from these data statistics. Although we had also seen many management experiences and reasonable aspects in our research, from the perspective of the structure of the crisis management model, the coding nodes may not fully comply with the basic element structure of crisis management. Therefore, as long as we follow the framework of the basic model and 10 managerial guidelines, the crisis management system of Nanning primary schools will be established step by step and play an increasingly important role in the actual school management.

This research finding was in accordance with the theories or research of Author Zhang (2018) which was found that Construction of 4R Crisis Management Theory System. Also, the findings were in the same direction with Researcher Lin & Xie (2021). and Researcher Liou (2015) about a kind of dynamic crisis life cycle model related to crises. Moreover, regarding the field of public relations, it was found that the Importance of Public Relations in Developing Crisis Management Plans corresponding to the research of Researcher Thelma.St talking about social resources, Researcher Estep proposing to establish and consolidate a lasting school community relationship. However, the research of Researcher Alanezi (2021) it was found that low reliance on social networks for crisis management which was different from establishing a social resource network.

7. Recommendations

Based on the research findings, the following recommendations are proposed in three key aspects:

7.1 Recommendation for Policies Formulation

First of all, Nanning Education Bureau should provide policy support for each school to establish a crisis management system at the administrative level, and arrange relevant professional guidance and training.

At the school level, a crisis management team composed of school leaders, teachers, staff, and students should be formed with the principal or legal representative of the school as the main leader.

The management structure of the crisis management team can be divided based on the functions of crisis management, such as policy formulation team, prevention management team, information management team, crisis response team, social coordination team, etc.

7.2 Recommendation for Practical Application

1) Strengthen ideological publicity and training on crisis awareness and prevention. Fully leverage the subjective initiative of school leaders, teachers, and students in crisis management;

2) Strengthen daily crisis prevention work, such as developing a list of daily crisis investigation contents, a crisis analysis checklist, and detailed management rules for equipment and instruments use in schools.

3) Establish a tripartite linkage mechanism between schools, society, and families, and regularly carry out relevant communication and learning activities to enhance crisis response capabilities, and continuously familiarize, deepen, and improve crisis response mechanisms and procedures.

Strengthen the crisis assessment and evaluation system, including crisis damage assessment, crisis response strategy assessment, crisis recovery effect assessment, etc., continuously improve and enhance the effectiveness and structure of crisis management through summary and evaluation.

7.3 Recommendation for Further Research

The future development of information technology in society places higher demands on crisis management capabilities, and there will be a certain contradiction between the

power of technology and the development of humanities. How to achieve efficient crisis management while respecting individual rights, and truly protect the lives and property of schools, teachers, students, and employees, was a topic worth pondering.

In addition, the crisis management system was constructed by various factors. From the perspective of crisis management model architecture, the process of crisis occurrence, response, disappearance, and transformation was a round-trip cycle. Therefore, with the changes in social environment and human development, there will inevitably be changes in relevant crises and crisis management factors. Therefore, exploring more suitable crisis management mechanisms in such a dynamic environment was highly worth studying.

Finally, we would like to point out that the application of crisis management models needs to be tested through practice. Therefore, the model also needs to be continuously adjusted through a large amount of data collection and analysis in order to reflect the maximum advantages of the model. Therefore, although the model may have different defects in practice, it also provides a reasonable reference for the management of primary schools in Nanning.

In future research, it was hoped that this model can constantly learn from the practice data of school management, and constantly improve, and eventually become the implementation standard of crisis management in primary schools in Nanning City.

References

- Alanezi, A. (2021). Using social networks in school crisis management: evidence from middle school principals in Kuwait. **Education 3-13**. 49(8), 935-944.
- Brinkmann, J. L., Cash, C., & Price, T. (2021). Crisis leadership and coaching: a tool for building school leaders' self-efficacy through self-awareness and reflection. **International Journal of Mentoring and Coaching in Education**. 10(2), 234-246.
- Cole, T. St. (2016). Evaluation of crisis management plan: an analysis of primary schools in Jamaica. Dissertation Title
- Mizrahi, S., Vigoda-Gadot, E., & Cohen, N. (2021). How well do they manage a crisis? The government's effectiveness during the Covid-19 pandemic. **Public Administration Review**. 81(6), 1120-1130.

- Lin. M., & Xie, S. (2021). **Academic research on the management physique of compulsory education in China since the reform and opening up: process characteristics and prospect.**
- Liou, Y. H. (2015). **School Crisis Management: A model of Dynamic Responsiveness to Crisis Life Cycle.**
- Ozkayran, S. E., & Yetis, A. A. (2020). **The Opinion of Teachers on Crisis Management in Guidance Services.**
- Zhang, N. (2018). **Construction of university emergency Crisis management system based on 4R Theory.**