GUIDELINES FOR IMPROVING THE EFFICIENCY OF SUDDEN CRISIS EVENT MANAGEMENT IN PUBLIC UNIVERSITIES IN NANJING

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A thesis paper submitted in partial fulfillment of the requirements for the Degree of Doctor of Philosophy Program in Educational Administration

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Thesis Title Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing

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ABSTRACT

The objectives of this research are to investigate the current situation of the management efficiency of sudden crisis events in public universities in Nanjing, to provide guiding principles for improving the management efficiency of such events in these universities, and to evaluate the applicability and feasibility of these guiding principles in public universities in Nanjing. The sample group of this research consists of 265 mid-level managers from 6 different types of public universities in Nanjing. There are 12 interviewees in this research. There are 9 experts in the evaluation group. The research tools of this study include questionnaires, structured interviews, and evaluation forms. The statistical methods used for data analysis are percentage, mean, standard deviation, and content analysis.

The research findings show that the current situation of the management efficiency of sudden crisis events in public universities in Nanjing is at a relatively high level in five aspects. The mean value of crisis recovery is the highest, followed by learning and reflection, while the mean value of crisis prevention is the lowest. The guiding principles for improving the management efficiency of sudden crisis events in public universities in Nanjing in five aspects include 42 measures. The results about evaluation of the suitability of guidelines was at the highest level. The feasibility of the guidelines was at high level.

Keywords: Guidelines for Improving, Efficiency of Sudden Crisis Event Management, Public Universities in Nanjing

ชื่อเรื่อง	**แนวทางการพัฒนาประสิทธิภาพการบริหารจัดการภาวะวิกฤตสำหรับมหาวิทยาลัยรัฐในมณฑลหนานจิง**
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บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์ 1) เพื่อศึกษาประสิทธิภาพการบริหารจัดการภาวะวิกฤตสำหรับมหาวิทยาลัยรัฐในมณฑลหนานจิง 2) เพื่อเสนอแนวทางการพัฒนาประสิทธิภาพการบริหารจัดการภาวะวิกฤตสำหรับมหาวิทยาลัยรัฐในมณฑลหนานจิง และ 3) เพื่อประเมินความเหมาะสมและความเป็นไปได้ของแนวทางการพัฒนาประสิทธิภาพการบริหารจัดการภาวะวิกฤตสำหรับมหาวิทยาลัยรัฐในมณฑลหนานจิง จากการศึกษาทฤษฎีและงานวิจัยที่เกี่ยวข้อง การพัฒนาประสิทธิภาพการบริหารจัดการภาวะวิกฤตสำหรับมหาวิทยาลัยรัฐในมณฑลหนานจิง กลุ่มตัวอย่างที่ใช้ในการวิจัยครั้งนี้ ได้แก่ ผู้บริหารระดับกลางมหาวิทยาลัยรัฐในมณฑลหนานจิง จำนวน 6 แห่ง รวมทั้งสิ้น 265 คน ผู้ให้ข้อมูลสัมภาษณ์ ได้แก่ ผู้บริหารระดับกลางมหาวิทยาลัยรัฐในมณฑลหนานจิง จำนวน 6 แห่ง ผู้เชี่ยวชาญประเมินความเหมาะสมและความเป็นไปได้ของแนวทาง ได้แก่ ผู้บริหารระดับสูงหรือนักวิชาการอาวุโส จำนวน 6 คน และผู้บริหารจากหน่วยงานรัฐบาล จำนวน 3 คน รวมทั้งสิ้น 9 คน เครื่องมือที่ใช้ในการวิจัย ได้แก่ แบบสอบถาม แบบสัมภาษณ์แบบมีโครงสร้าง และแบบประเมิน สถิติที่ใช้ในการวิจัย ได้แก่ ค่าร้อยละ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน และการวิเคราะห์เนื้อหา

ผลการวิจัยพบว่า 1) ประสิทธิภาพการบริหารจัดการภาวะวิกฤตสำหรับมหาวิทยาลัยรัฐในมณฑลหนานจิง โดยภายรวมอยู่ในระดับสูง เมื่อพิจารณาเป็นรายด้าน พบว่า การฟื้นตัวจากภาวะวิกฤติ มีค่าเฉลี่ยอยู่ในระดับสูงสุด รองลงมาคือการเรียนรู้และการไตร่ตรอง ส่วนการป้องกันภาวะ วิกฤติ มีค่าเฉลี่ยอยู่ในระดับต่ำสุด 2) แนวทางการพัฒนาประสิทธิภาพการบริหารจัดการภาวะวิกฤตสำหรับมหาวิทยาลัยรัฐในมณฑลหนานจิง ประกอบด้วย 5 ด้าน รวมทั้งสิ้น 42 มาตราการ ได้แก่ การพัฒนาประสิทธิภาพการป้องกันภาวะวิกฤติ จำนวน 10 มาตราการ การพัฒนาประสิทธิภาพการเตรียมพร้อมสำหรับภาวะวิกฤติ จำนวน 8 มาตรการ การพัฒนาประสิทธิภาพการตอบสนองต่อภาวะวิกฤติ จำนวน 8 มาตราการ การพัฒนาประสิทธิภาพการฟื้นตัวจากภาวะวิกฤติ จำนวน 7 มาตรการ และการพัฒนาประสิทธิภาพการเรียนรู้และการไตร่ตรอง จำนวน 9 มาตรการ 3) ผลการประเมินความเหมาะสมของแนวทาง มีค่าเฉลี่ยอยู่ในระดับสูงสุด และความเป็นไปได้ของแนวทาง มีค่าเฉลี่ยอยู่ในระดับสูง

คำสำคัญ: แนวทางการพัฒนา ประสิทธิภาพการบริหารจัดการภาวะวิกฤต มหาวิทยาลัยรัฐในมณฑลหนานจิง

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Looking back on the process of writing this doctoral dissertation, I deeply appreciate the hardships and joys of academic research. In the days to come, I will continue to adhere to my original intentions, aim for the heights of academia, and contribute to the advancement of human knowledge. Simultaneously, I hope to apply my research findings to practice and make more contributions to the progress and development of society.

Wu Jie

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Chapter 1
Introduction

Rationale

During the period of social transformation, universities are confronted with a diverse range of crises, which have brought varying degrees of anxiety, stress, and harm to the members of the school. Campus emergencies can happen in any corner, at any time, and to anyone on the campus, directly or indirectly influencing the normal operation of the school and posing threats of varying degrees, both overt and latent, to the school's development. They often push the school into a situation that is hard to control. Emergencies are characterized by their unpredictability, the urgency of disposal, the severity of harm, and the wide-ranging impact (randomness, discreteness, and low probability). The current emergencies in universities are difficult to prevent and control, tend to aggravate conflicts, damage the school's reputation, and cause extremely negative reactions both domestically and internationally. Therefore, the issues related to the management of campus emergencies in universities have rapidly become an important item on the agenda. How to actively prevent possible campus emergencies, minimize damages, maintain the normal teaching and living order of universities, and effectively protect the safety of teachers and students has become a serious and urgent issue that universities must address nowadays.

The governance of the world's higher education is confronted with significant challenges. The outbreak and dissemination of the COVID-19 pandemic in 2020 constitute the most extensive, challenging, and profound global public crisis since World War II. Higher education, as a crucial sector in society, has also been significantly impacted by the pandemic. According to statistics, over 1.6 billion students worldwide have been precluded from engaging in normal campus learning and life due to the pandemic, accounting for approximately 90% of the global student population. In the early stages of the outbreak, as the number of confirmed cases and fatalities continued to soar globally, more than 190 countries shut down their campuses, triggering panic among people worldwide.

The current situation of crisis management in Chinese higher education is presented as follows. With the deepening of reform and opening up as well as the transformation of the economic system, China's higher education stepped into a phase of rapid growth at the end of the last century. From 2014 to 2023, China has emerged as the world's largest country in terms of the scale of higher education, achieving the popularization of higher education in a "leapfrog" manner. Over the past decade, the total number of students in China's regular higher education institutions has witnessed a rapid increase, soaring from over 25.47 million in 2014 to 41.83 million in 2023, with an increment of 1.81 million compared to the previous year. The gross enrollment rate of higher education reached 54.4 percent, marking an increase of 2.8 percentage points from the previous year. The number of students in colleges and universities has generally seen a significant rise, which has imposed unprecedented pressure on the teaching and management of schools. Owing to the rapid growth rate of the higher education scale and various issues such as the higher education system and structural adjustment, the work of colleges and universities is in a state of tension, complexity, and numerous contradictions. Simultaneously, as the development of China's social economy is also in a transitional period, the influence of society on colleges and universities further exacerbates the increase of unstable factors within the school, posing a severe challenge to the management of colleges and universities. China attaches great significance to crisis management work. Since the outbreak of SARS in 2003, crisis management research in China has entered a stage of rapid development.

The Development Trend of Crisis Management in Public Universities in Jiangsu. In recent years, the crises occurring in colleges and universities in China are on the rise. As a province with a highly developed economy and culture, Jiangsu has witnessed continuous crises in its universities. Through the online search for university crises, it is found that the number is substantial and cannot be underestimated. Colleges and universities are an important part of the entire social crisis management system. The population in colleges and universities is relatively concentrated, but the various crisis response measures are not perfect, making them likely to be directly impacted by various risks, and causing some potential problems to not receive due attention, thereby becoming the causes of crises. In recent years,

campus crises have shown complexity and diversity, and crisis management in universities has gradually drawn attention from all walks of life.

Nanjing, as the capital of Jiangsu Province, is home to 51 various types of universities, including 38 public universities, 26 undergraduate institutions, and 12 vocational colleges, serving as a representative of higher education in Jiangsu Province. Based on the social background of the efficiency of sudden crisis event management in public universities in Nanjing, this research aims to analyze the current status of the efficiency of sudden crisis event management in public universities in Nanjing by proposing relevant theories. It endeavors to identify the deficiencies in educational crisis management and explore the efficiency of sudden crisis event management in public universities in Nanjing. By refining and improving the theoretical framework for the efficiency of sudden crisis event management in public universities in Nanjing, this research aims to assist educational authorities in evaluating and inspecting the level of crisis management in universities, as well as to formulate relevant policies and measures. The ultimate goal is to actively promote and facilitate the development of the efficiency of sudden crisis event management in public universities in Nanjing.

Research Questions

1. What is the current situation of the efficiency of sudden crisis event management in public universities in Nanjing?

2. What are the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing?

3. Are the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing suitable and feasible?

Objectives

1. To study the current situation of the efficiency of sudden crisis event management in public universities in Nanjing.

2. To provide the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing.

3. To evaluate the suitability and feasibility of the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing.

Scope of the Research

Population and the Sample Group

Population

The population of this research were 858 middle-level administrators from 6 different types of public universities in Nanjing, including regular universities and vocational colleges.

The Sample Group

According to the Krejcie and Morgan (1970) sampling table, The sample group of this research were 265 middle-level administrators from 6 different types of public universities in Nanjing, including regular universities and vocational colleges. Proportionate sampling, and simple random sampling methods were used.

Key Informants

The interviewees in this research was 12 middle-level administrator from 6 universities in Nanjing, China. The qualifications of interviewees are as follows:

1. Educational background: They should have obtained at least a bachelor's degree, and preferably a master's degree or higher in a relevant field of study.

2. Professional experience: They should have a substantial amount of experience working in the higher education sector, preferably in administrative or managerial roles within universities or related institutions.

3. Management skills: They should possess strong leadership, decision-making, and problem-solving skills. They should also be able to effectively manage resources, handle conflict, and collaborate with various stakeholders.

4. Knowledge of higher education policies and regulations: They should have a deep understanding of the policies, regulations, and guidelines that govern the operation of universities and the higher education system.

5. Communication and interpersonal skills: They should have excellent communication skills, both verbal and written, and the ability to build and maintain positive relationships with staff, faculty, students, and external partners.

6. suitability and innovation: They should be suitable to changing circumstances and be able to propose and implement innovative ideas and guidelines to improve university operations and performance.

Key Informants

The experts for evaluating suitability and feasibility of the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing consist of 6 high-level administrators or senior scholars from universities in Nanjing and 3 administrators from the government department.

They are required to possess the following capabilities:

1. Education Background: The experts possess a master's degree or above in relevant majors and hold the professional title of associate professor or above.

2. Profound knowledge in educational management: The experts should have extensive knowledge in educational management, including higher education policies, regulations, and operational management.

3. Crisis management experience: The experts should have experience in crisis management, being able to identify and resolve potential crises and issues in higher education management.

4. Data analysis skills: The experts need to have the ability to collect, organize, and analyze relevant data to derive accurate assessment results.

5. Communication and collaboration skills: The experts should possess excellent communication and collaboration skills, enabling effective information exchange and cooperation with various stakeholders.

6. Decision-making and problem-solving abilities: The experts should have good decision-making and problem-solving abilities, capable of proposing effective solutions and recommendations for crisis situations.

7. Professional judgment: The experts should have professional judgment skills in the field of educational management, being able to make accurate assessments and decisions based on the actual circumstances.

The Variable

According to the analysis of relevant theories and research, the variables involved in improving the Efficiencyof sudden crisis event management in public universities in Nanjing mainly included 5 aspects is follows:

1. Crisis Prevention
2. Crisis Preparedness
3. Crisis Response
4. Crisis Recovery
5. Learning and Reflection

Advantages

Perspective Innovation: This research is carried out in accordance with the "Public Relations Crisis Management Model" put forward by American scholars Seeger and Greenberg. The crisis event management is divided into five stages: crisis prevention, crisis preparedness, crisis response, crisis recovery, learning, and reflection. A series of methods for improving management efficiency are proposed from the perspective of ideological and political education, offering a novel perspective for the research.

Method Innovation: This research employs the Western matrix analysis method to divide the management of sudden crisis events into three dimensions: crisis level, crisis type, and crisis nature. Disposal measures are determined based on the position of crisis event management on the coordinate.

Theoretical Innovation: This research will put forward strategies to improve the management efficiency of sudden crisis events in public universities in Nanjing, which will assist in evaluating the development of crisis management capabilities in public universities in Nanjing. It not only consolidates and improves the theory of university crisis management but also promotes its progress.

Suggested Value: This research is beneficial for the education department to evaluate and inspect the management efficiency of sudden crisis events in public universities in Nanjing, thereby facilitating the formulation of relevant policies and reform measures. The research findings are also intended to enhance the management efficiency of crisis events in public universities in Nanjing.

Definition of Terms

Sudden Crisis Events refer to unanticipated emergencies that pose threats to personal safety, property damage, or social order. These events are characterized by their abruptness, complexity, and urgency. The effective management of sudden crisis events demands timely and accurate information gathering and dissemination, scientific decision-making and command, close collaboration and coordination, as well as the implementation of appropriate emergency measures. This study primarily focuses on incidents that occur within the campus, threatening the safety and health of teachers and students, causing property damage, or having a significant social impact.

Crisis management refers to the strategic process adopted by organizations or individuals in response to sudden crisis events. Its objective is to identify, assess, and address potential risks associated with crises, minimizing harm and safeguarding interests. Crisis management encompasses planning, prevention, emergency response, recovery, and reconstruction. It includes the establishment of emergency management systems, the development of crisis plans, the coordination of resources and personnel, and the implementation of crisis communication and response measures. Its aim is to effectively respond to crises, safeguard lives and property, and enable organizations or individuals to rapidly recover and thrive after the crisis.

Crisis management efficiency refers to the ability to promptly and effectively take measures and response actions during a crisis, with minimal time and resource costs, in order to efficiently handle the crisis event, protect the safety of personnel and assets, minimize the losses and impacts caused by the crisis, and achieve rapid crisis control and recovery. Crisis management efficiency encompasses five variables: 1) crisis prevention, 2) crisis preparedness, 3) crisis response, 4) crisis recovery, and 5) learning and reflection.

Crisis prevention involves the early identification of potential hazards by universities, the implementation of preventive measures, and the establishment of emergency preparedness plans to prevent the occurrence of crises or minimize their impact. This includes improving risk assessment and monitoring, establishing effective safety management mechanisms, raising safety awareness among staff and students, improving crisis information dissemination, and strengthening cooperation and coordination with relevant departments. Through these preventive measures, the likelihood of a crisis can be reduced, potential risks can be addressed in advance, and the safety of personnel and property can be ensured, thereby maintaining organizational stability and sustainable development.

Crisis preparedness refers to the thorough preparations made by universities to effectively respond to potential crises. This entails developing detailed emergency plans and measures, establishing emergency organizations and command systems, clarifying responsibilities and tasks, procuring necessary resources and equipment, conducting emergency drills and training, and formulating responsive and appropriate action plans. The objective of crisis preparedness is to be able to respond to crisis

events in a timely and effective manner, minimize casualties and property losses, and ensure campus safety and stability.

Crisis response refers to the prompt, organized, and effective measures taken by universities to control and manage crisis situations. This includes implementing emergency rescue and safety evacuation measures, coordinating resources and personnel, promptly communicating information and instructions, collaborating with relevant departments and agencies, and carrying out crisis handling and response work. The goal of crisis response is to minimize casualties and property loss to the greatest extent possible and to restore normal campus order as quickly as possible after the crisis, protecting the lives and property of students, faculty, and staff.

Crisis recovery refers to the measures and actions taken by universities to restore and rebuild the normal functioning and living conditions of individuals, organizations, or society affected by sudden incidents, crises, or disasters. The main methods of crisis recovery include effective communication and information management, collective decision-making and cooperative actions, psychological support and team building, media and public relations management, etc.

Learning and reflection involve the summary and synthesis of experiences and lessons obtained from crisis management practices through the analysis of crisis cases, the evaluation of crisis management mechanisms, the review of crisis response processes, etc. It aims to identify successful guidelines and practices, discover shortcomings and deficiencies, establish effective crisis response mechanisms, and improve the overall crisis management capability. It is of great significance for improving the crisis management level and response capability of colleges and universities.

Universities in Nanjing refer to higher education institutions located in Nanjing, Jiangsu Province, China. Jiangsu Province is situated in eastern China and is one of the most economically and culturally vibrant regions in the country. As the provincial capital of Jiangsu Province, Nanjing is home to numerous prestigious universities, covering a wide range of disciplines and making significant contributions to talent cultivation and scientific research. In this study, universities are defined as higher education institutions with functions in teaching, research, and social services, including various types of vocational schools, undergraduate colleges, and research universities. In terms of form, they include full-time ordinary colleges and full-time

adult colleges. In terms of nature, they mainly refer to higher education institutions within the national education system. In terms of ownership, they are divided into public universities and private universities. In this study, the terms "university," "higher education institution," and "college" are used interchangeably and refer to the institutions defined above.

Administrators in this research refer to the administrative personnel engaged in management and supervision work within the education department. They hold middle-level leadership positions within the education department and are responsible for formulating and implementing education policies, managing education resources, and overseeing school operations. They need to possess knowledge and skills in administrative management, be able to coordinate cooperation between departments, handle administrative affairs, organize meetings and activities, and communicate and coordinate with schools, teachers, and educational institutions. Education department administrators need to have specialized knowledge in the field of education, understand education policies and regulations, and actively promote education reform and development. Their goals include improving education quality, promoting educational equity, and providing students with a favorable learning environment and opportunities.

Research Framework

In this research, the theoretical foundation is rooted in the School Public Relations Theory put forward by American scholars Carter and Center in 1952, along with the "Public Relations Crisis Management Model" proposed by Stephens and Greenberg in 1988. Additionally, other scholars have put forth theories regarding crisis management in higher education, such as the Crisis Management Life Cycle Theory and the Crisis Management Communication Theory. The renowned crisis management scholar and organizational scientist Ian Mitroff mentioned in his book "Managing Crises Before They Happen: What Every Executive and Manager Needs to Know About Crisis Management" that crisis management in higher education requires considering multiple factors to enhance the ability and effectiveness of higher education institutions in responding to crises. Based on the classical theories and discussions of scholars, the researchers identified five key factors that impact the management of sudden crisis events: 1) Crisis prevention, 2) Crisis preparedness, 3)

Crisis response, 4) Crisis recovery, and 5) Learning and reflection. These factors constitute the framework of this research.

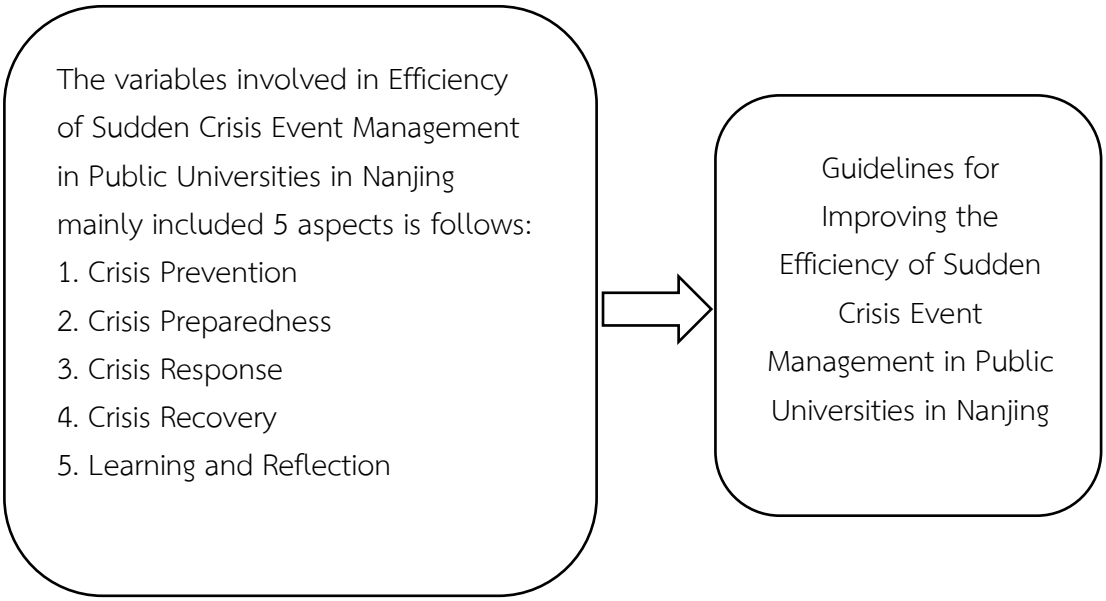

Figure 1.1 Research Framework

Chapter 2
Literature Review

Crisis management in universities is an important task to ensure their safe and stable operation. In this section, we will analyze literature, concepts, theories, and research related to crisis management in universities from the perspectives of theoretical foundations and a review of domestic and international research achievements. We will also propose research guidenines and optimization directions to promote the improvement of sudden crisis event management in public universities in Nanjing. Specifically, we will elaborate on the following four aspects.

1. Concept and theory of the educational administration
2. Concept and theory of the crisis management in universities
3. Context of universities in Nanjing
4. Related research

Concept and Theory of the Educational Administration

Educational management is a discipline that encompasses a broad spectrum of fields and aspects. It aims to manage and organize various aspects of educational institutions and schools in order to achieve educational goals and enhance educational quality. Educational management encompasses multiple domains, such as school leadership and management, human resource management, financial management, curriculum management, teaching quality management, and student affairs management. Through the formulation and implementation of effective guidelines, plans, and measures, educational management facilitates the efficient operation of educational institutions and schools, and provides a favorable learning and working environment for teachers and students. This section comprises the following four aspects: 1) The definition of educational management, 2) The significance of educational administration in universities, 3) The theory of educational administration in universities, 4) Technological innovation in educational management.

Definition of educational administration

Ivan·Riyadi (2020, pp. 47-60) in "The Contribution of Applied Psychology for Educational Management Issue" posits that "educational management refers to the

process of planning, organizing, coordinating, and regulating resources to enhance the capabilities of individuals participating in education." In this article, educational management is depicted as a factual behavior of psychology, which is analyzed by examining the behavioral system of school organizations involving multiple components. The significance of psychology in educational management is emphasized, and educational institutions are tailored based on psychological conditions and student needs.

Sorinel Mihalcea, Delia Iuliana Banica, Gabriela Boca (2020, pp. 252-261) in "Implementing Education Administration for Non-living Higher Education Essential for National Economy" contend that "educational management refers to the competent and effective management of the education system and educational institutions." In this article, the authors introduce the predictions of analysts regarding the new economic crisis that Romania would face in 2018, indicating that the value and effectiveness of management activities depend on the validation of management science theories and the multidimensional skills of administrators who have the ability to mobilize all resources (human, informational, financial, etc.) to successfully achieve the goals of each field and social unit. It is pointed out that effective educational management is a necessary condition for economic success, and educational administrators must adapt to the requirements of the information society.

Muhlasin (2019, pp. 62-75) in "Learning Management to Improve Learning Achievement" suggests that "learning management is the process of carrying out instructional tasks by applying learning principles, including planning, implementation, and evaluation." "Learning management is a mindset that executes instructional tasks by applying learning principles and steps, including planning, implementation, and evaluation, to achieve the educational goals discussed by the author." It is noted in the article that management is the process of achieving organizational goals, and learning management encompasses planning, implementation, and evaluation.

Maria Pralea (2017, pp. 203-207) proposed that "educational management focuses on the organization and management of educational institutions, while educational leadership emphasizes guiding and motivating others to achieve educational goals." "Educational management is the art of leaders mobilizing the

efforts of all members of the organization to achieve goals. As described in this article, educational management is the process of tracking an action to be carried out under optimal conditions, recognizing and assuming responsibility, surpassing achievements and failures, and guiding a group to achieve organizational goals." It emphasizes that educational management rationalizes the paradox and is the process of mobilizing efforts to achieve organizational goals.

According to R Đurić Igor (2015, pp. 117 - 135), the concept of educational management refers to the effective management of human capital in educational institutions to ensure their development and competitiveness. Management principles are increasingly being accepted in the field of education and require further theoretical and empirical research.

E·Mark Hanson pointed out that "education administration" itself is a novel concept full of charm. The relevant domestic teaching materials on the objectives, principles, processes, and methods of education administration, as well as the introduction of behavioral science, systematic management, and contingency management ideas, are sufficient to meet the needs of readers.

Frederick Winslow Taylor, the founder of the scientific management theory, believed in standardized, normalized, and institutionalized management. This concept is practical, scientific, coordinated, normative, and efficient, laying a foundation for the formation and development of modern management theory. His principles of scientific management have significant implications for educational management practice.

"The Collection of Theses on School Educational Management" is a compilation of multiple graduation theses related to the theme of school educational management. It includes journal papers and dissertations. These papers cover various aspects, such as the pathways to improve the level of educational management in secondary vocational schools, enhancing the comprehensive qualities of educational management personnel, innovative management models, and talent development objectives.

In the United States, research in educational management primarily focuses on five key areas: "leadership," "values," "improvement," "relationships," and "policy and law." In the area of "leadership," the emphasis is on leadership practices and styles. "Values" encompass the concepts and implementation of educational equity.

"Improvement" mainly involves the development and enhancement of schools, principals, and teachers. "Relationships" include interpersonal communication and assessment within schools. "Policy and Law" refers to the implementation and impact of policies and laws.

The book "Research on Educational Management," published by People's Education Press, primarily expounds on important aspects of educational management such as organization, systems, human resources, and leadership. It adopts empirical methods to study relevant issues in education under theoretical guidance.

Regarding the definition of educational management, it refers to the coordinated process of the rational allocation of educational resources to enable them to operate effectively in order to achieve organizational goals. It encompasses both macro and micro management. This includes educational administrative management by governments at various levels, from national to local, as well as internal management within various types of schools, including universities, secondary schools, primary schools, and even preschools, adult education, or vocational schools.

The core objective of educational management is to provide quality education and promote student learning and development. Educational management focuses on the organization and management of educational institutions, ensuring the rational allocation of resources and the smooth implementation of teaching processes. School leadership and management are important components of educational management, involving the roles and responsibilities of leaders, leadership behavior, and leadership styles. Excellent school leaders should possess leadership skills, organizational management abilities, communication skills, and decision-making abilities to inspire the potential of teachers and students and drive the development and reform of schools.

Research and practice in educational management need to be guided by educational management theories and scientific research. Educational management theories cover traditional management theories and specialized educational management theories, such as educational leadership theories and school effectiveness theories. Through scientific research and empirical studies, educational

administrators can better understand and address issues in educational management, continuously improve and innovate management practices.

In conclusion, educational management is a discipline that manages and organizes various aspects of educational institutions and schools to achieve educational goals and improve educational quality through the formulation and implementation of effective guidelines, plans, and measures. It involves multiple aspects, including school leadership and management, human resource management, financial management, curriculum management, teaching quality management, and student affairs management. Educational administrators need to possess leadership skills, organizational management abilities, communication skills, and decision-making abilities, and practice guided by scientific research and educational management theories. The goal of educational management is to provide efficient operation and a high-quality educational environment for educational institutions and schools, promoting student learning and development.

Importance of education administration

University education administration is of vital significance for elevating the quality and standard of teaching, as well as the institutional advancement. The utilization of big data technology significantly augments education administration by offering comprehensive information innovation. Education administration brings forth both opportunities and challenges, underscoring the imperative of adopting efficacious methods for educational management.

R·Đurić Igor (2015, pp. 117 - 135) emphasizes the significance of proficiently managing human capital, as it directly determines the development and competitiveness of educational institutions. The notion of education administration pertains to the effective management of human capital within educational institutions to guarantee their development and competitiveness. The acceptance of management principles in the education domain demands further theoretical and empirical investigations.

Venera Kendusi (2015, p. 2) asserts that education administration is indispensable for the overall success and quality of schools, as it encompasses the skills and capabilities of school administrators in communication and collaboration. The author deliberates on the functions and significance of school administrators in

managing a successful, high-quality school, highlighting their role in the education sector.

Dr. Mairaj Salim, Dr. Asma Zaheer, Dr. Naima Bogari (2018, pp. 943 - 947) contend that management education is regarded as valuable in career transitions, development, and adding value to management education. The authors explore the worth of management education and the benefits it bestows upon graduates in terms of relevance, knowledge acquisition, behavior modification, and outcomes.

Weizhe Li (2021, pp. 1 - 6) underlines the significance of higher education administration due to the dynamics and variations of college students and the necessity to address existing issues. The author objectively assesses the informatization construction of educational management in five universities in a province through a questionnaire survey, interviews with students and relevant management personnel, and arrives at the aforementioned conclusions.

Han Guan (2019, pp. 964 - 973) accentuates the efficacy of higher education administration for the advancement of universities and proposes an optimization approach to manage college students in the era of big data, within the context of information technology.

Huang Qi & Liheng Shi (2021, pp. 334 - 340) state that higher education administration is crucial for enhancing teaching quality, comprehensive competitiveness, and providing outstanding talents to society. This article analyzes the current situation of artificial intelligence technology and private universities, and explores the idea of examining the teaching management of private universities using artificial intelligence technology to improve teaching quality.

The significance of higher education administration is manifested in various aspects. Higher education administration refers to a series of activities aimed at effectively managing universities. As an important venue for nurturing talents and promoting social progress, the quality and effectiveness of its management directly influence talent development and social development. Consequently, the importance of higher education administration cannot be disregarded.

Firstly, higher education administration is pivotal for the quality of higher education. The quality of higher education is directly associated with the cultivation of students' academic proficiency and professional capabilities. Higher education administration ensures the enhancement of education quality through the

formulation of rational teaching plans, the recruitment and training of excellent teachers, and the establishment of a comprehensive evaluation system. Sound education administration provides students with the requisite educational resources and support, offering them a high-quality learning environment and opportunities. Simultaneously, higher education administration also emphasizes the training and development of teachers, enhancing their professional qualities and teaching competencies, thereby further elevating the quality of education.

Secondly, higher education administration is crucial for the development and innovation of universities. It needs to focus on strategic planning and goal setting to ensure the direction and outcome of university development. Administrators need to formulate long-term development plans, including disciplinary construction, research support, and international exchanges. Furthermore, higher education administration encourages and promotes innovation and reform, nurtures the application of new educational concepts and technologies, and enhances the educational level and comprehensive competitiveness of universities.

Thirdly, higher education administration has a substantial impact on the organizational effectiveness and resource utilization efficiency of universities. Universities are complex organizational systems involving teaching, scientific research, administration, and more. Higher education administration requires the coordination and integration of various departments and functions to ensure the rational allocation of resources and collaborative work. Administrators need to develop scientific human resource management guidelines, recruit and train excellent teachers and staff, establish effective performance evaluation systems, and motivate and tap into the potential of employees. Moreover, higher education administration also needs to focus on financial management, allocating and utilizing financial resources appropriately to improve resource utilization efficiency. Through effective education administration, universities can enhance organizational effectiveness, ensure the maximization of educational resources, and provide a solid guarantee for the sustainable development of schools.

Content of education administration

The content of university education administration pertains to the exploration and summary of the methods, principles, and laws of higher education

administration, with the aim of enhancing the quality and efficiency of higher education and offering guidance and support for the advancement of universities.

Yanchun Qi (2016, pp. 24 - 29) puts forward the concept of higher education administration as the theoretical framework, structure, and practice for the effective management and improvement of universities. In this article, the author conducts fundamental research on optimizing and implementing the theoretical framework of higher education administration in the context of the Internet, integrating the basic characteristics of the Internet to form a new paradigm with practical significance.

Arzu Akkaya (2021, pp. 800 - 802) introduces a series of conceptual frameworks, educational management models, and practices to educational administrators, practitioners, and scholars in "Theories of Educational Management and Leadership", offering an overview of educational management practices. These frameworks and models are of significance and utility to educational administrators, industry professionals, and scholars, providing them with conceptual frameworks and models for educational management.

Aleksandr A. Fedorov, Ekaterina P. Sedykh, Elena V. Mialkina (2019, pp. 1257 - 1268) in their article "University of Education: Structure and Main Components of Management" analyze the transformation of the educational system as well as the practices of world universities. They disclose the essence and main structural components of university education, which is a specialized higher education institution aimed at providing a systematic solution to the issues of teacher education administration and development. The establishment of an educational university model is based on philosophy, socio-economic factors, and teaching concepts.

In conclusion, the theories of higher education administration mainly encompass the following aspects:

Firstly, the goal management theory. Higher education administration should possess clear and specific goals and tasks to ensure a definite direction and objectives for higher education. The goal management theory emphasizes that higher education administration should be student-centered, focusing on cultivating students' innovative spirit and practical abilities, with the goal of nurturing high-quality talents and providing robust support for the development of universities.

Secondly, the organizational management theory. Higher education administration requires the establishment of a scientifically rational organizational structure, clarifying the responsibilities and authorities of each department. The organizational management theory emphasizes that higher education administration should focus on internal coordination, optimize resource allocation, and enhance management efficiency. Simultaneously, attention should be given to humanized management, advocating an open, democratic, equal, and individual-respecting management model to stimulate the enthusiasm and creativity of teachers and students.

Thirdly, the quality management theory. Higher education administration needs to focus on the evaluation and monitoring of educational quality to ensure continuous improvement. The quality management theory emphasizes that higher education administration should concentrate on quality, strengthen the management of curriculum design, teaching methods, and teacher training, establish a sound quality assurance system, and improve educational quality and efficiency.

Fourthly, the innovation management theory. Higher education administration needs to pay attention to the cutting-edge educational theories and technologies both domestically and internationally, and actively introduce and promote innovative ideas and management methods. The innovation management theory emphasizes that higher education administration should advocate innovative thinking and abilities, cultivate students' innovative spirit and practical abilities, actively promote educational and teaching reforms, and improve the quality and level of education.

Fifthly, the human resources management theory. Higher education administration requires the rational allocation and management of human resources to stimulate the enthusiasm and creativity of teachers and students. The human resources management theory emphasizes that higher education administration should focus on talent cultivation and development, establish a sound mechanism for talent selection, training, and motivation, build a high-quality faculty, and provide a continuous supply of talent support for the development of universities.

The above is merely a basic explanation of the theories of higher education administration. In reality, higher education administration covers a broad spectrum of areas, and there are numerous specific applications and research on various theories

and methods. The research on the theories of higher education administration is not only the responsibility of university administrators but also the responsibility of everyone who is concerned about the development of higher education. Only through continuous research and innovation can we continuously improve the quality and efficiency of higher education and contribute to the cultivation of more outstanding talents.

Technological innovation in educational administration

The innovation of technologies and methods in educational management is of great significance for enhancing the competitiveness and quality of educational services. It entails the employment of innovative mechanisms and technological advancements to boost the innovation activities of universities. In the era of big data and internet technology, the application of big data technology in educational management is on the rise, presenting both new opportunities and challenges for student management and the improvement of teaching quality.

Ou Xiu-ying (2018, pp. 275 - 280) explores the relevant theory of big data in university education administration and develops a flexible, open, and applicable system solution for university education administration based on big data. The article summarizes the relevant theory of big data, analyzes its significance, and puts forward effective solutions based on the application status of big data in the university education administration system. Hence, it is necessary for university education to utilize big data platforms for analysis, and the establishment of a networked information management platform is of crucial importance.

Jie Zhao (2020, pp. 308 - 313) in the article "Development and Innovation of Education Administration Information in College with Big Data" discusses the challenges that universities face in using big data to manage educational information. The author proposes innovative information management methods, such as establishing standardized network information platforms and utilizing big data technology teams to enhance the quality of educational management in universities.

Mauro Sciarelli, Mohamed Hani Gheith, and Mario Tani (2020, pp. 137 - 150) in "The Relationship between Quality Management Practices, Organizational Innovation, and Technical Innovation in Higher Education" investigate the impact of quality management practices on innovation in higher education and how organizational innovation affects technical innovation. The study finds that certain quality

management practices positively influence innovation through personnel and process management, while organizational innovation predicts technical innovation.

Emiliano T. Hudtohan (2021, pp. 079 - 083) in the article "Frameworks for Management, Innovation, and Education in the COVID-19 Era" points out that first, the VUCA (Volatility, Uncertainty, Complexity, Ambiguity) world during the turbulent period of transformation (2012 - 2025) can be explained using the classical Greek mythologies of Gaia, Chaos, and Eros. Secondly, the framework of this article showcases the relationship between university management, education, and technology in the context of the COVID-19 environment.

In conclusion, technological innovation in educational management refers to the reform and upgrade of educational management through the utilization of modern technology and methods to improve efficiency and quality and meet the evolving educational demands. Technological innovation in educational management can encompass various aspects such as information management, intelligent management, and big data analysis. Below, I will elaborate on technological innovation in educational management from several perspectives. Firstly, information management is one of the important directions of technological innovation in educational management. With the rapid development of information technology, its application in educational management has become a trend. Secondly, intelligent management is another important direction of technological innovation in educational management. The application of artificial intelligence, big data, and AI technology can make educational management more intelligent and refined. Additionally, the application of big data analysis in educational management is also an important direction of technological innovation. With the continuous accumulation and expansion of educational data, the use of big data analysis techniques can uncover potential patterns and valuable information in behavioral data, management evaluations, and other data, providing scientific evidence for educational management decision-making. Furthermore, the application of technologies such as virtual reality, augmented reality, and distance education in educational management is also an important direction of technological innovation.

Concept and Theory of the crisis management in universities

Crisis management in higher education is the focus of this study, aiming to clarify the related theories of emergency management in higher education, compare emergency events and crisis events in higher education, and compare emergency management and crisis management in higher education. This research plays an important role in conducting studies. In this section, the research on the theory of crisis management in higher education will mainly focus on the following aspects: the definition of crisis management in higher education, factors influencing educational management in higher education, comparative study of emergency events and crisis events in higher education, and comparative study of emergency management and crisis management in higher education.

Definition of education crisis Management in Universities

In the realm of crisis management, two frequently employed terms in foreign literature are "Emergency management" and "Crisis management" (Akovou, 2002; Albert, 1991; Brock, 2007; Kathleen, 2003; Kyoo-Man, 2008). Notably, the term "Crisis management" is utilized to denote crisis management (Lisa, 2008; Judy, 2007; Murphy, 2003; Richard, 2005). For instance, the Federal Emergency Management Agency (FEMA) and Crisis Management Plan exemplify this usage.

Twinkle, Kavita Dua (2021, pp. 675-680) employs the term crisis management to delineate crisis management during the Covid - 19 pandemic. They assert that crises can exert negative impacts, and crisis management is the process of preventing, evading, and managing crucial processes (planning, guiding, and supervising) for the survival of an organization. In this article, a crisis is defined as a substantial threat to operations that can yield adverse consequences if not handled appropriately. Crisis management encompasses the prevention, avoidance, and management of critical processes (planning, guiding, and supervising) for the organization's survival. It includes well-defined roles, responsibilities, and requirements: crisis prevention, crisis assessment, crisis handling, and crisis termination. COVID - 19 impacts different individuals in diverse manners.

Yuxiang Zou (2021, pp. 395 - 398) offers a detailed account of crisis management in universities in Nanjing, the capital of Jiangsu Province, in the article "University Students Crisis events Managements in Big Data Age - A Case Study of Nanjing." The author contends that the current management model for university

student crisis events is ineffective, and the extensive application of big data technology in management is lacking. This study reveals that the investigation information resources in managing university student crisis events are more comprehensive and centralized, while the occurrence, unpredictability, and randomness of crisis events are more pronounced.

Eugene L. Zdziarski, J. Michael Rollo, Norbert W. Dunkel (2020, pp. 32 - 46) explore the influence of crises on university campuses in "The Crisis Matrix." They examine what constitutes a crisis and provide a definition, addressing numerous common characteristics of crises. The dimensions of the crisis matrix pertain to the severity of the crisis. The types of crises constitute the dimensions in the crisis matrix.

In conclusion, crisis management refers to the strategic process adopted by organizations or individuals in response to sudden crisis events. Its objective is to identify, assess, and tackle potential risks associated with crises, minimizing harm and safeguarding interests. Crisis management encompasses planning, prevention, emergency response, recovery, and reconstruction. This includes the establishment of emergency management systems, the development of crisis plans, the coordination of resources and personnel, and the implementation of crisis communication and response measures. Its aim is to respond effectively to crises, protect life and property, and enable organizations or individuals to recover rapidly and thrive in the aftermath of the crisis.

Importance of education crisis Management in Universities

Salman Elbedour, Futiem N. Alsubie, Shareefah N. Al'Uqdah (2021, pp. 208 - 215) delve into school crisis management planning. They contend that school crisis management is grounded in research guidelines and trauma-informed plans to tackle immediate circumstances and potential long-term consequences. In this paper, the authors delineate the components of a school crisis management plan and the vital role of school mental health staff in developing and implementing trauma-informed school crisis management plans, encompassing prevention, communication, and diverse protocols for various crises. School crisis management planning demands research-based, trauma-informed guidelines. School mental health staff play a crucial part in the development and implementation of trauma-informed school crisis management plans.

Lie Wang (2020, pp. 244 - 252) centers on the deficiencies of crisis management in colleges and universities and deliberates on new approaches to overcome these shortcomings in the article "Research on the Crisis Management Problems and Countermeasures of Colleges and Universities in Micro Age". The author suggests commencing from five aspects: establishing new thinking, setting up new mechanisms, adopting new methods, formulating new guidelines, and implementing new education. The article accentuates the significance of efficient crisis management in the micro age for colleges and universities.

Jie Cao, Li Zhu, He Han (2018, pp. 223 - 254) explore emergency disaster management. Apart from risk management, coordination management, and crisis management, modern crisis management is also associated with disaster management. Among the four categories of emergency management: natural disasters, accidents, public health emergencies, and social security incidents, natural disasters constitute a considerable proportion. Thus, the emergency response to natural disasters is an essential component of emergency management. Furthermore, reinforcing research on disaster management and probing into the occurrence and development laws of natural disasters hold great value for the scientific implementation of emergency management. This article examines the emergency response to natural disasters as an important part of emergency management and investigates the occurrence and development laws of natural disaster events, which is beneficial for the scientific implementation of disaster management.

In conclusion, crisis management in universities is of paramount significance as it impacts the safety and stability of teachers and students, and influences the reputation and development of the institution. Effective management can also enhance the emergency response capability, fulfill social responsibilities, and facilitate the school's improvement of the system, perfect the prevention and control mechanism, and achieve sustainable development.

Components of Crisis Management in Universities

Regarding the classification of sudden incidents in universities and university crisis management, scholars have conducted numerous discussions. For instance, Wang Yu and Zhang Tao (2006, p. 266 - 271) categorize university crises into four types: (1) Natural crisis events (occurring in universities), such as earthquakes, flash floods caused by heavy rain, typhoons, hurricanes, lightning, epidemics, and other

natural disasters; (2) Social crisis events, such as large-scale student protests, terrorist attacks, self-harm resulting from faith crises, psychological crises, setbacks in the worldview, and mutual violence; (3) University facility crises, such as building damage or collapse, crises arising from the improper use of computer software, network issues, and harm to teachers and students caused by the improper or lack of maintenance of school sports and health facilities; (4) University management crises, such as leadership changes, leadership styles, dereliction of duty, property crises, student source crises, academic misconduct, image crises due to declining teaching quality, and lagging logistics management. Incidents like food poisoning, lax security management, and criminal intrusion, etc.

Wang Pengcheng (2007, p. 266 - 271) classifies sudden incidents in universities based on their nature as follows: (1) Political incidents; (2) Natural disasters; (3) Criminal and public security incidents; (4) Public health incidents; (5) University management incidents; (6) Teaching-related incidents; (7) Campus network incidents; (8) Other sudden public incidents that affect school safety and stability. Although there are various classifications for sudden incidents in universities, Jian Min (2007, p. 113 - 117) believes that classifying them based on their nature facilitates management.

Regarding the definition of phases in university crisis management, there are relatively few discussions among scholars, and no consensus has been reached.

Li Zhiqiang (2006, p. 231 - 242) divides university crisis management into five stages according to the work cycle and focus: (1) Pre-crisis management; (2) Crisis occurrence stage management; (3) Crisis response stage management; (4) Post-crisis recovery management; (5) Crisis management evaluation.

Ma Ye (2007, p. 34 - 40) divides university crisis management into four stages: Crisis prevention and control management, Crisis preparedness management, Crisis response management, and Crisis recovery management.

Wu Yuqing (2005, p. 82 - 91) divides the development of crises into three stages. The first stage is the latent period, which is usually a longer period where there are no obvious signs of crisis, but latent contradictions and risks exist. The second stage is the outbreak period, which is typically short but intense, with a high degree of pressure. This period is the most difficult and urgent for crisis management. The third stage is the recovery period, where lessons learned from the crisis are

summarized, and efforts are made to restore normal order and actively seek new growth points.Jian

Min (2007, p. 113 - 117) believes that dividing sudden incidents into pre-incident, incident, and post-incident phases is clearer and more practical for managing these incidents.

Table 2.1 The comprehensive result of the effectiveness characteristics of sudden crisis event management in university

Author/ Characteristicsi of Sudden crisis event management in university	Crisis Prevention	Crisis Preparedness	Leadership	Crisis Response	Crisis Recovery	resource provision	organizational structure	Learning and Reflection
Carter and Senter (1952)	√			√	√		√	√
Komes (1980)	√	√			√	√		√
Stephens and Greinberg (1988)	√	√	√	√	√			
Fink (1996)	√	√	√		√	√		√
Robert Heath (1996)	√	√		√	√		√	
Wang Yu (2006)	√	√	√	√	√			
Li Zhiqiang (2006)		√				√	√	√
Jian min (2007)	√		√			√		√
Wang Pengcheng (2007)	√		√	√			√	√
Eugene (2007)		√			√	√	√	√
David Farris (2014)	√		√	√			√	√
Total	**9**	**7**	**6**	**7**	**7**	**5**	**6**	**8**

In this research, the theoretical foundation is based on the school public relations theory proposed by American scholars Carter and Senter in 1952. Based on the theories of higher education crisis proposed by American scholar Komes and "The Public Relations Crisis Management Model" proposed by Stephens and Greinberg in 1988, along with other theories of crisis management in higher education proposed by various scholars. These theories include the Crisis Management Life Cycle Theory and the Crisis Management Communication Theory. Renowned crisis management scholar and organizational scientist Ian Mitroff (2005) mentioned in his book

"Managing Crises Before They Happen: What Every Executive and Manager Needs to Know About Crisis Management" that managing crises in higher education requires considering multiple factors such as the characteristics of universities, risk assessment, resource allocation, regulations and policies, and practical experience to enhance the ability and effectiveness of crisis response in higher education institutions.

According to Table 4.2, based on classic theories and discussions by scholars, researchers have relatively determined five key factors influencing the management efficiency of sudden university crises to be: 1) crisis prevention, 2) crisis preparedness, 3) crisis response, 4) crisis recovery, and 5) learning and reflection.

Crisis Prevention: Prediction and identification of sudden crisis event management

According to the crisis management model proposed by Seeger and Greenberg, crisis prediction and identification are crucial factors influencing educational crisis management. They contend that universities need to possess the capability to predict and identify potential crises, encompassing monitoring environmental alterations, analyzing risk factors, and evaluating internal organizational matters. This demands that universities pay heed to the dynamic changes in social, political, economic, and other aspects, and promptly discern potential crisis signs. Based on this, scholars both at home and abroad have conducted extensive research and development on crisis prediction and identification.

In their study "Campus emergency management capability based on fuzzy comprehensive evaluation", Minghua Wu, Jing Zhao, and Taowei Zhang (2016, p. 863 - 874) assert that in recent years, campus emergencies have occurred frequently, and emergency management capabilities have not only become a focus of public attention but also an inescapable management issue for universities. They employ the analytic hierarchy process to determine the weights of various evaluation indicators and establish a campus emergency management capability evaluation model through fuzzy comprehensive evaluation. Emergency management capabilities are divided into five levels, and all secondary indicators are evaluated using the expert evaluation method. Then, evaluation vectors for primary indicators are obtained through calculations. Finally, the level evaluation vector of the campus

emergency management capability is derived based on the weight vector of the main indicators.

In their study "Scaling 911 Texting for Large - Scale Disasters: Developing Practical Technical Innovations for Emergency Management at Public Universities", Andrea H. Tapia, Nicklaus A. Giacobe, and Pamela J. Soule (2016, p. 73 - 85) contend that in large - scale crisis events, Emergency Operations Centers (EOCs) cannot fulfill the needs of thousands of people attempting to send alerts or request emergency services. Nevertheless, new technologies driven by the right policies and tested for their advantages and disadvantages in data - rich and semi - predictable environments can assist in addressing the limitations of current PSAPs (Public Safety Answering Points).

In the study "Research on Multi - Agent Cooperative Mechanism of University Emergency Management from the Perspective of Big Data" by Li Wang (2016, p. 281 - 286), it is stated that the frequent occurrence of campus emergencies not only threatens the stability and development of campuses but also challenges the traditional emergency management systems and models. By combining the characteristics of the big data era and utilizing the theories of emergency lifecycle, collaboration, and multi - agent, the study proposes a multi - agent cooperative mechanism for emergency management, two big data case libraries, four cycles, and three disposal subjects based on the categorization of emergencies in universities. Furthermore, the internal operation mode of this mechanism is explained, providing a new approach for the theory of emergency response in universities.

Zhang Qing - xia (2009, p. 117 - 135), in "The Building Research of Plans System for Crisis Management in Colleges and Universities," claims that the current crisis management in Chinese universities lags behind in both specialized crisis management institutions and detailed crisis management plans. Personnel at all levels lack the experience or ability to effectively control crises.

In his book "Campus Crisis Management: Planning, Prevention, and Recovery," Eugene (2007) extensively discusses the development and training of emergency teams in higher education institutions. He primarily addresses the following viewpoints and issues: the operational guidelines of university emergency teams, the composition of team members, the skills and cooperation within the team,

organizational flexibility, responsibilities, leadership, functional structure, daily work, rapid response, and the training of university emergency teams.

From these studies, it can be observed that both domestic and foreign universities typically adopt a hierarchical system and corresponding responses to campus emergencies. Specialized institutions are usually responsible for emergency management affairs. In China, emergency response plans in higher education generally employ a hierarchical response system, which can be referenced or improved based on the specific circumstances of Chinese universities.

In the analysis of campus emergency events and crisis events, the crisis matrix analysis method has been utilized, which is not commonly seen in China. The crisis management matrix is a conceptual model that can determine the impact of crisis events on universities and determine how to respond to them. The crisis management matrix comprises three dimensions: crisis level, crisis type, and crisis nature. Crisis levels are classified as general accidents, emergencies, and disasters; crisis types are categorized as environmental crises, facility crises, and personal crises; crisis natures are classified as crises caused by human factors and crises caused by accidental events. Hence, when a crisis event occurs, the initial step is to determine the position of the crisis event in the coordinate model in order to decide on the corresponding response measures. Of course, sometimes crisis events are in a constant state of evolution, so the position in the coordinate system is a dynamic process that requires the appropriate allocation of resources in response. The crisis management matrix holds significant significance for crisis management in Chinese universities, and we can modify and apply it in accordance with our specific situation, which helps enhance the crisis management capabilities of Chinese universities.

In conclusion, crisis assessment refers to a comprehensive evaluation and analysis of a crisis event, aiming to understand its nature, scope, and impact, and provide fact-based decision-making basis. It is an essential component of educational crisis management, encompassing information collection and organization, recognition of crisis nature, determination of crisis scope, identification of potential risks, and assessment of resources and needs. Through crisis assessment, universities can gain a comprehensive and in-depth understanding of the crisis event, enabling them to formulate effective crisis management guidenines and measures to ensure

the safety of students and staff, and maintain the reputation and stable operation of the institution.

The management structure refers to a team composed of designated professionals appointed by the university, aiming to address and manage potential crisis events. This team is responsible for establishing and implementing crisis response plans, which include prevention, response, and recovery phases. They are in charge of developing policies, procedures, and protocols to ensure the university can respond timely and accurately to various crises, safeguarding the safety of students and ensuring the normal operation of the institution. They collaborate with departments such as campus security, public relations, and the media to provide emergency response, communication, and coordination, with the aim of minimizing the impact of crises and ensuring efficient crisis management.

Crisis Preparedness: Preparation and planning for sudden crisis event management

At present, domestic research on emergency management in universities mainly concentrates on the study of response mechanisms for emergencies in universities, and the research is relatively profound. It encompasses two aspects: the characteristics and formation mechanisms of emergencies in universities, as well as the study of institutional systems for responding to emergencies in universities. The following scholars have conducted research on the institutional aspects of educational crisis management:

Ma Ye (2007, pp. 67 - 78) analyzed the causes of emergencies in universities, dividing them into external and internal causes. Firstly, the external causes include: 1) the negative impacts of the market economy; 2) the complex socialization of the surrounding environment; 3) the potential crises arising from the information advantages of the internet; 4) the infiltration and destruction of universities by hostile forces at home and abroad. Secondly, the internal causes include: 1) new problems brought about by the socialization reform of university logistics; 2) problems among the students themselves; 3) the rapid increase in the number of students and the complexity of the student source; 4) the increase in impoverished students and the increased pressure on graduate employment.

Chen Changgui, a professor at the Institute of Education Sciences of Sun Yat - sen University (2003, pp. 3 - 4), in "A New Mechanism for Responding to Emergencies

in Universities," believes that it should be a management mechanism distinct from the normal situation, meeting the requirements of efficiency, rapid response, and in line with the actual situation of the university. It should not only effectively respond to short - term emergencies that occur in clusters but also have medium - to long - term or even continuous response plans; it should not only play a role in combating COVID - 19 but also be able to respond promptly to future potential crises. This includes: a rapid decision - making and research system, an efficient and unified command system, a timely information release and feedback system, a necessary expert consulting system, and a strong social support system.

Ye Jinfu (2004, pp. 78 - 81) emphasizes in "Establishing and Improving the Response Mechanism for Emergencies in Universities" the implementation of work plans, the establishment of a responsibility mechanism for dealing with emergencies, the role of ideological and political education, and the establishment of a lenient and strict educational mechanism.

Zhu Xiaobin (2007, pp. 90 - 93) proposes guidelines for preventing crises in universities, strengthening crisis consciousness, enhancing safety education, properly handling crises, establishing crisis management teams, and providing psychological intervention for students after a crisis.

Guo Ji, Gao Xiaoping, Li Chengwei, Shen Ronghua, and Liu Yandan (2006, pp. 6 - 9) in "Research Report on the Construction of Emergency Management Mechanism in Universities" suggest that the current focus of emergency management work in Chinese universities should be on strengthening mechanism innovation and scientifically formulating and implementing the following specific measures: innovative mechanisms for public opinion management in universities; the establishment of a flat information transmission network; the establishment of a daily emergency management operation mechanism; the effective integration of university emergency management into the government emergency management mechanism; the establishment of a sound organizational system to achieve public governance of university emergency management; and the strengthening of emergency psychological support.

According to Yang Jiang (2018, pp. 531 - 534) in "Research on Guidelines in Response to College Network Public Opinion from the Perspective of Crisis Management," in the context of profound social transformation and development,

universities have become hotspots for network public opinion crises in recent years. The article discusses the crisis management guidelines for responding to network public opinion in universities, including early warning, educational guidance, and crisis response. Studying the guidelines for responding to network public opinion from the perspective of crisis management has become a necessity and urgency for universities. The characteristics of network public opinion in universities are explained, and the necessity of crisis management for network public opinion in universities is analyzed. Guidelines for responding to network public opinion in universities are explored from the aspects of working mechanism, early warning, educational guidance, and crisis response.

Two internationally renowned academic journals for studying emergency management are the Journal of Emergency Management and the International Journal of Emergency Management. These journals focus on publishing relevant research findings on crisis management abroad. The crisis management system in the United States is built on the basis of overall governance, integrating comprehensive crisis response plans, efficient core coordination mechanisms, and a comprehensive crisis management network through legal means. Similarly, governments at all levels in the United States attach great importance to crisis management in schools, formulating a series of policies and regulations, as well as detailed operational guidelines.

According to Redman D (2021, pp. 47 - 60) in "An Emergency Management Doctrine," crisis management has not yet developed in a coherent or comprehensive manner. Different terms are used to denote the same concepts. The significant development of crisis management requires a standardized comprehensive principle. In this article, the author explains the theoretical framework of crisis management and clearly identifies the five dimensions and their constituent parts necessary for informed crisis management practice. Although the causes and severity of emergencies may vary, the emergency management processes required to handle these emergencies optimally are relatively similar. The "all hazards approach" of emergency management establishes and strengthens the universality of processes, procedures, planning templates, and organizational structures. Three types of institutions related to emergency management activities are discussed, including principal institutions, coordinating institutions, and supporting institutions. The four

key functions of emergency management are elaborated in detail, including mitigation, preparedness, response, and recovery, which are often carried out simultaneously. Ten activities and seven resources related to emergency management are highlighted. There are various ways to represent the integration of these five dimensions, ensuring completeness while maintaining clarity; the two most common ones are described. When crisis management experts follow this principle, they can coordinate all relevant personnel to ensure the consideration of all aspects of any danger and to ensure the coordination and optimization of all organizations, institutions, functions, activities, and emergency management resources. Following this process is the only way to ensure the best outcomes in any emergency situation.

In conclusion, management mechanisms refer to a series of institutional and procedural measures established within universities to manage crises. These mechanisms include the establishment of crisis management teams, clear responsibilities and authorities, the development of crisis early warning mechanisms, the formulation of crisis response plans, the establishment of emergency communication channels, and the enhancement of crisis training and drills. By establishing effective crisis management mechanisms, universities can respond rapidly to crises, take appropriate measures, and strengthen cooperation and communication with external institutions and stakeholders. This enables the formation of a collective and coordinated response to crises, ensuring the safety of students, faculty, staff, and educational resources.

Crisis Response: Implementers of sudden crisis event management

According to the public relations crisis management model put forward by Seeger and Grinberg, crisis preparedness and planning are crucial factors influencing educational crisis management. The organizational structure of educational crisis management is a specific institution or team accountable for crisis management and response within the education system. The construction of a crisis management team in higher education institutions is a vital aspect for effectively handling educational crises.

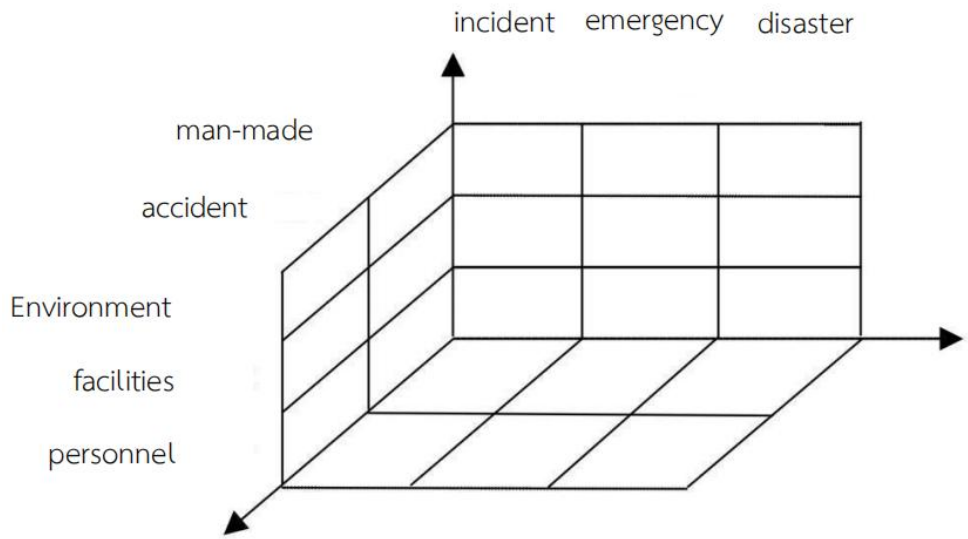

Figure 2.1 A crisis management matrix diagram

The organizational structure of educational crisis management typically encompasses the following elements: leaders, the crisis management team, resource allocation, and coordination. Additionally, information and communication, support from faculty and staff, as well as student, parental, and community involvement, are also significant components of the crisis management organizational structure in higher education institutions. The organizational structure of educational crisis management can be adjusted and adapted based on the size and requirements of different educational institutions. Domestic and foreign scholars have conducted research on this topic.

Lu Wenhui (2006, p. 35 - 37) asserts that a sound organizational structure is essential for the effective implementation of crisis management, and universities should establish a crisis management committee in accordance with their own circumstances. The committee should consist of key departments such as the office, the research office, the press office, the on-site office, the consulting office, the logistics office, and the evaluation office, undertaking responsibilities ranging from crisis early warning to crisis assessment.

Ma Ye (2007) deliberates on the composition of crisis management teams in higher education institutions. He contends that crisis management teams in universities are essentially decision-making teams responsible for making major decisions and determinations, such as announcing the entry into an emergency state

and initiating emergency and recovery plans. The crisis management team also serves as an advisory group, composed of specialists with a profound understanding of crisis management who can provide evaluations for specific cases. Its aim is to coordinate and utilize various resources both within and outside the university to minimize the negative impact of crisis events on the school and its students. The crisis management team in higher education institutions should be established before any crisis or crisis event occurs rather than being formed only when a crisis emerges. It should be a permanent institution or department specifically responsible for managing crises in the school. However, through investigations, it is discovered that almost no higher education institutions have dedicated crisis management structures, as they are generally integrated into the existing organizational structures. As a permanent institution within higher education institutions, the crisis management team operates throughout the entire process of crisis management. It holds a central position in managing crises and bears substantial responsibilities. The success or failure of crisis management, whether it leads to safety and stability or even opportunities, primarily depends on the correct decision-making of the crisis management team and the work carried out throughout the crisis management process. The members of the crisis management team are the key personnel in the overall crisis management of the university. Before a crisis, they are the planners of crisis management. During a crisis, they organize other relevant departments and personnel to jointly respond to the crisis based on the situation. After a crisis, they also need to conduct crisis recovery and evaluation management, draw lessons, summarize experiences, and improve crisis management. Each member is an important part of crisis management, and none can be absent. They form a team and require a spirit of cooperation. They also need to continuously enhance their knowledge and skills in crisis management through learning, training, and exercises. Nevertheless, under the existing management model in higher education institutions, how to carry out organizational reform is a complex issue that requires practical considerations and overall coordination in order to truly establish an effective emergency management team in universities.

The United States possesses advanced experience in emergency management in universities. Analyzing and drawing upon this experience can enhance emergency management in higher education institutions. The experience of offering emergency

management and homeland security degree programs at Texas Southern University highlights the significance of training emergency management personnel who can directly establish connections with minority communities affected by disasters.

Jonathan (2008, p. 48 - 52) and Steven (2006, p. 250 - 263) argue that the establishment of emergency management teams in universities is crucial for responding to unexpected events, and the development of a professional workforce is fundamental to university emergency management. While China's universities also attach great importance to the training of professionals, the organized professional teams are still insufficient to meet the needs of university emergency management. Therefore, it is worthwhile to learn from the experience of team development in American universities.

In their article "The Professionalization of Emergency Management in Institutions of Higher Education," David Farris and Robert McCreight (2014, p. 73 - 94) explore the professional development of emergency management as a field in higher education institutions (IHEs). The authors conduct a comprehensive analysis of existing literature, research, surveys, and best practices to provide a comparison between emergency management in IHEs and county-level emergency management organizations. They offer an overview of the demographic statistics, typical responsibilities, and regulatory environment of institutional emergency management departments to illustrate the unique challenges faced by emergency management personnel in IHEs. The article concludes with recommendations to continuously strengthen emergency management as a profession within IHEs, including defining the roles and responsibilities of emergency management personnel, establishing best practices, and improving opportunities for women and minority ethnic groups to enter the field.

Crisis Recovery: Recovery and restoration in sudden crisis event management

According to the Public Relations Crisis Management Model put forward by Coombs and Holladay, crisis handling and response are crucial processes in educational crisis management. This demands that universities take prompt actions, engage in effective crisis communication, and implement appropriate response measures when a crisis occurs. This encompasses the timely dissemination of accurate information, effective communication with relevant stakeholders, taking

appropriate actions to address the crisis, and actively participating in the crisis investigation and the development of corrective measures. Building on this model, scholars both at home and abroad have further enriched and developed the domain of crisis handling and response.

According to the crisis management model put forward by Sturges and Grunberg, crisis recovery and restoration are vital processes in crisis management within the education domain. After resolving a crisis, universities are required to undertake crisis recovery and restoration efforts. This encompasses assessing the impact of the crisis on the university's image and reputation, taking measures to restore the damaged image, strengthening relationships with stakeholders, and formulating long-term development and risk management guidelines to prevent the recurrence of similar crises. Based on this, domestic and international scholars have further enriched and developed the field of crisis recovery and restoration.

Coombs, W. T. (2007, p. 163 - 176) proposed the Situational Crisis Communication Theory (SCCT) in "Protecting organization reputations during a crisis: The development and application of situational crisis communication theory". It emphasizes the significance of actively responding to public concerns and criticisms during a crisis to restore an organizational reputation.

Benoit, W. L. (1995, p. 119 - 134) discussed image restoration guidelines in "Accounts, excuses, and apologies: A theory of image restoration guidelines", exploring how organizations can restore damaged reputations through different communication methods and restoration guidelines during a crisis.

Seeger, M. W. (2006, p.232 - 244) summarized the best practices in crisis communication, including timely information updates, transparency, empathy, and coordinated actions, through research conducted by an expert panel in "Best practices in crisis communication: An expert panel process".

Fearn-Banks, K. (2019, p. 152 - 189) analyzed different types of crisis communication and response guidelines through case studies in "Crisis communications: A casebook approach", providing practical guidance and sharing experiences.

Coombs, W. T. (2007) discussed planning, managing, and responding to crisis communication in the book "Ongoing crisis communication: Planning, managing, and responding".

Ulmer, R. R., Sellnow, T. L., & Seeger, M. W. (2016) outlined effective crisis communication methods and the transformation of crises into opportunities in the book "Effective crisis communication: Moving from crisis to opportunity".

Mitroff, I. I., & Anagnos, G. (2000) emphasized the importance of crisis prevention and proactive crisis management in "Managing crises before they happen: What every executive and manager needs to know about crisis management".

Coombs, W. T., & Holladay, S. J. (2007, p. 296 - 311) studied the impact of reputation on crisis management in "Unpacking the halo effect: Reputation and crisis management".

Pearson, C. M., & Clair, J. A. (1998, p. 59 - 76) discussed reframing crisis management and presented methods and perspectives for restructuring crisis management in the "Academy of Management Review".

Benoit, W. L., & Czerwinski, A. M. (1997, p. 556 - 579) addressed the situational and contextual factors of crisis communication in organizations in "Organizations and their members: A contingency approach to crisis communication".

Coombs, W. T. (2014) provided a comprehensive guide on ongoing crisis communication, including planning, managing, and responding, in "Ongoing crisis communication: Planning, managing, and responding (4th ed.)".

Claes, E., & Hakanen, T. (2013, p. 227 - 230) explored the role of social media in crisis communication, its advantages, disadvantages, and best practices in "Crisis communication and the social media: Advantages, disadvantages and best practices" published in the "Journal of Industrial and Intelligent Information".

These literature reviews offer theoretical and practical guidance on crisis communication and reputation management. They introduce different theoretical frameworks, such as the situational crisis communication theory and image restoration guidelines, to assist organizations in actively responding to public concerns and criticisms during crises and restoring their reputations. These reviews also present best practices, such as timely updates, transparency, empathy, and coordinated actions, as well as case studies and shared experiences to help organizations better cope with and manage crises. Additionally, some literature explores the importance of prevention and proactive crisis management, as well as the role and best practices of social media in crisis communication. Overall, these

reviews provide significant perspectives and approaches to crisis communication and reputation management that are guiding in practical applications.

In conclusion, communication response refers to an effective approach for universities to manage and respond to crises. It is an important strategy for restoring and repairing educational crisis management. The process aims to ensure that universities can timely and accurately convey information to internal and external stakeholders, enhancing transparency, trust, and cooperation. The key goals of communication response are to deliver accurate information, eliminate uncertainty, maintain reputation and credibility, as well as restore confidence and stability among affected groups. Additionally, this process also includes developing crisis communication plans, training crisis communication teams, selecting appropriate communication channels and media, and the ability to assess and adjust communication guidenines in a timely manner. Communication response is a comprehensive and ongoing process in university crisis management, with the aim of minimizing and managing the impact of crises on universities and providing lessons learned for future crises.

Learning and reflection: Collection, categorization, organization, and learning from case studies in sudden crisis event management

In the United States, emphasis is placed on the study and learning from cases in emergency management, summarizing and assimilating lessons and experiences (Fink, 1996; Jonathan, 2003). Evidently, case analysis and accumulation are of great significance in university emergency management as they can significantly enrich the experience in handling emergencies and enhance emergency management capabilities. It is crucial not only to collect and organize cases within the university but also to gather relevant cases from other universities, and even from abroad. These cases should be compiled in specialized archives and organized and studied by dedicated personnel. The theoretical research and practical operations in foreign emergency management, including systems, regulations, organizations, and even principles and cases of emergency response, are all worthy of reference and learning in research.

Li Hua (2018, p. 120 - 125): It discusses the importance of the learning and summary stage of university crisis management. It emphasizes that through in-depth analysis of crisis events, lessons should be summarized and the crisis management

system should be improved. It is proposed that the crisis awareness education for teachers and students should be strengthened to improve the ability to respond to crises.

Zhang Min (2019, p. 90 - 95): It studies the methods and approaches of the learning and summary of university crisis management. It is believed that a scientific evaluation mechanism should be established to conduct a comprehensive evaluation of the effect of crisis management. At the same time, it is necessary to strengthen exchanges and cooperation with other universities to draw on beneficial experiences.

Wang Qiang (2020, p. 70 - 75): It analyzes the impact of the learning and summary stage of university crisis management on the development of the school. It is pointed out that through summarization, problems and deficiencies in management can be found, providing a reference for the long-term development of the school. It is suggested to strengthen the informatization construction of crisis management to improve work efficiency.

Wu Chong (2012, p. 82 - 87) Based on the analysis of existing evaluation methods, a comprehensive evaluation system for university emergency management capabilities has been constructed, providing a reference for improving the emergency management level of universities.

Yue Danni, Fu Nannan, Wang Meiying (2020) It is pointed out that the active participation of non-governmental organizations is helpful to improve the overall emergency management capabilities, emphasizing the role of social forces in university crisis management.

Wu Minghua, Zhao Jing, Zhang Taowei (2016, p. 863 - 874) Using the analytic hierarchy process and fuzzy comprehensive evaluation method, a campus emergency management capability evaluation model has been established, providing a method for evaluating the emergency capabilities of universities.

Zhang Wanhong (2009) From the perspective of strategic analysis, the ways to improve the emergency management capabilities of campuses in China are discussed, providing ideas for universities to formulate emergency management strategies.

Wang Lie (2020, p. 244 - 252) The shortcomings of university crisis management in the micro-era are discussed, providing a direction for universities to improve crisis management work in the new era background.

To effectively respond to various emergencies, universities worldwide have adopted numerous measures to enhance their emergency management capabilities. However, through literature searches, research on the connotation, structure, and comprehensive evaluation of emergency management capabilities has yet to be found. Therefore, systematic research on the emergency management capabilities of universities remains a relatively new research field internationally.

In terms of emergency management research in China, the specific contents studied are diverse. Scholars from different academic backgrounds have conducted research from their own perspectives, combining their disciplinary advantages to investigate specific aspects or problems related to emergency response mechanisms. For instance, economic research focuses on risk assessment, sociology research examines civil participation and public support, psychology research centers on individual crisis intervention, mass communication theory explores media management during crises, legal research investigates emergency legislation, public policy and public management research looks into financial issues related to emergency response, organizational theory explores the organizational structure for emergency response, organizational behavior research focuses on decision-making during emergencies, and information theory investigates information systems for early warning and communication during emergencies, among others.

In conclusion, learning and reflection pertain to the process of summarizing and integrating the experiences and lessons derived from crisis management practices to extract knowledge and skills beneficial for future crisis management. This summary can be achieved through analyzing crisis cases, evaluating crisis management mechanisms, reviewing crisis response processes, and more. The purpose of learning and summarizing is to identify successful guidelines and practices, recognize weaknesses and shortcomings, and propose improvements and enhancements. By continuously summarizing, improving, and refining crisis management efforts, higher education institutions can establish effective crisis response mechanisms and enhance their overall crisis management capabilities. The significance of learning from crisis management experiences and practices in higher

education lies in drawing lessons and disseminating successful experiences, addressing deficiencies, and continuously improving the overall level and effectiveness of crisis management. This provides valuable reference and guidance for other educational institutions or organizations, promotes the enhancement of crisis response capabilities within the entire education system, and ensures the safety of students, staff, and properties.

Context of universities in Nanjing

Overview of universities in Nanjing.

Nanjing universities refer to the universities located within the region of Nanjing city in Jiangsu province, China. Jiangsu province, situated in eastern China, is one of the most economically active regions in the country. As the provincial capital of Jiangsu, Nanjing is home to numerous excellent universities covering various disciplines, making significant contributions to talent cultivation and scientific research. Nanjing has a total of 51 regular universities, including 34 undergraduate institutions and 17 junior colleges. Among them, there are 38 public universities (26 undergraduate and 12 junior colleges) and 13 private universities (8 undergraduate and 5 junior colleges). These universities are under the administration of different authorities, including 8 under the national level, 16 under the provincial level, and 4 under the municipal level.

Below, researcher will focus on introducing six universities located within the jurisdiction of Nanjing city, based on their academic levels, nature of education, and affiliated departments. These universities are Southeast University, Nanjing Normal University, Jiangsu Open University, Nanjing XiaoZhuang University, Nanjing Vocational College Of Information Technology, and Jiangsu Union Technical Institute.

Southeast University (SEU) is a comprehensive research university that is directly under the Ministry of Education of the People's Republic of China. It is supported by the national "985 Project" and the "211 Project" to develop key universities. The university, which originated from Nanjing Higher Normal School founded in 1902, was formerly known as National Southeast University and is one of the earliest higher education institutions for science and technology in modern China. SEU has 17 schools, covering a wide range of disciplines such as engineering, science, humanities, law, management, economics, aerospace, life sciences, medicine,

materials, environmental and civil engineering, and environmental science. It is a leader in engineering, computer science, materials science, and life sciences in China, and has a high international reputation. SEU focuses on nurturing innovative talents, actively conducting scientific research and community service, and collaborates extensively with domestic and international universities, research institutions, and enterprises.

Nanjing Normal University is a comprehensive and high-level university located in Nanjing, Jiangsu Province, China. It was founded in 1902 and is supported as a key university in Jiangsu Province and a "Double First Class" institution for world-class discipline construction. The university has 16 colleges, covering a wide range of disciplines including literature, history, education, science, engineering, economics, law, management, and arts. It boasts excellent faculty and research capabilities with a large number of renowned scholars and experts from both domestic and international backgrounds. Nanjing Normal University is dedicated to cultivating well-rounded and innovative talents, emphasizing the development of humanities and creative abilities. It actively engages in academic exchanges and collaborations with universities both domestically and overseas, providing students with ample opportunities for academic research and practical experience.

Jiangsu Open University is a regular higher education institution affiliated with Jiangsu Province. It was established in 1979 and is one of the pilot universities for adult higher education in China. The university adopts a social-oriented and flexible open education model, providing lifelong learning opportunities and equal educational resources for adults. The university offers a multi-level and multi-disciplinary education system, including undergraduate, junior college, vocational, and graduate programs. Jiangsu Open University focuses on cultivating practical application abilities and has collaborated with domestic and foreign universities to offer dual-certificate and dual-degree programs. The university is committed to educational reforms and innovations, actively promoting information technology construction to provide students with a more convenient learning environment and services.

Nanjing XiaoZhuang University, established in 1978, is a comprehensive undergraduate institution located in Nanjing, Jiangsu Province, China. The college consists of 16 secondary colleges and offers 41 undergraduate majors. Nanjing

XiaoZhuang College focuses on the comprehensive development of students and strives to cultivate applied and innovative talents. With modern teaching facilities and a pleasant campus environment, the college has nurtured numerous outstanding graduates who excel in various fields. Adhering to the principles of "dedication, innovation, and excellence," Nanjing XiaoZhuang College provides quality education, research opportunities, and aims to become a reputable undergraduate institution with significant influence.

Nanjing Vocational College Of Information Technology is a vocational and technical college in Jiangsu Province, China. Formerly known as Nanjing Post and Telecommunication Vocational and Technical College, it was established in 1958. The college specializes in information technology and offers various programs such as computer science and technology, electronic information engineering, network engineering, and software engineering. Emphasizing practical teaching, the college collaborates with enterprises to provide students with internship and employment opportunities. The college aims to cultivate high-quality technical talents that meet the needs of the information industry, while actively promoting technological innovation and industrial development.

Jiangsu Union Technical Institute, established in 1958, is a comprehensive vocational and technical college located in Jiangsu Province, China. The college has 93 affiliated schools and offers over 170 five-year vocational programs, with over 700 specialty areas and 200,000 students enrolled. The college emphasizes practical teaching and collaborates with enterprises to provide students with internship and employment opportunities. It is dedicated to cultivating high-quality vocational talents that meet the needs of social development, focusing on comprehensive competence and innovation ability enhancement. The college actively engages in social services and technological innovation, contributing to local economic development and social progress.

These six universities have achieved high levels of reputation and influence in Nanjing City and even nationwide. They have made significant contributions to talent cultivation, scientific research, and societal service. These universities are committed to providing high-quality education and training, offering students broad platforms for development and rich learning resources. They have produced a large number of

outstanding professionals who have made positive contributions to the economic and social development.

The government's emphasis on crisis management.

China has successively promulgated 35 laws, 36 administrative regulations, and 55 departmental regulations related to crisis management. The crisis State Law and departmental crisis regulations are currently being drafted. The "People's Republic of China crisis Response Law" was passed by the 29th meeting of the Standing Committee of the Tenth National People's Congress of the People's Republic of China on August 30th 2007, and came into effect on November 1st 2007.On June 15th 2006,the State Council issued the "Opinions on Strengthening crisis Management Work," stating that strengthening crisis management is a major matter concerning the overall development of the national economy and society and the safety of people's lives and property. It is an important content of fully implementing the scientific outlook on development and building a socialist harmonious society. The government at all levels should adhere to the people-oriented approach, govern for the people, and fully perform government functions. "Schools should actively carry out education and popularization of public safety knowledge and crisis protection knowledge while strengthening campus safety work, and enhance the awareness of public safety among teachers and students."The "The 14th Five-Year Plan for National crisis System" issued by the State Council on February 14th2022, pointed out that by 2025, significant progress will be made in the modernization of the crisis management system and capabilities, forming a Chinese characteristic crisis management system with unified command, specialized and full readiness, quick response, and coordinated linkage between different levels. By 2035, a large-scale crisis system with Chinese characteristics that is in line with the basic realization of modernization will be established, comprehensively achieving crisis response in accordance with the law, scientific crisis response, and intelligent crisis response, and forming a new pattern of joint construction, co-governance, and sharing of crisis management. On January 5th 2023, the National Conference on crisis Management was held in Beijing. The meeting emphasized the need to improve the crisis management system, establish a collaborative and efficient crisis command system, build a comprehensive and sound legal system, strengthen grassroots crisis and social governance systems, establish a normalized and long-term risk assessment

system and information-based monitoring and early warning system, and improve security guarantee capabilities.

In January 2020, the Jiangsu Provincial Government issued the "Overall crisis Preparedness Plan for Jiangsu Province." In 2022, the Provincial Government Office issued the "Management Measures for the Release of crisis Warning Information on Jiangsu Province," and on January 13th 2023, the Jiangsu Provincial crisis Management Conference was held in Nanjing. It emphasized the need to establish a framework for comprehensive safety and crisis management, improve disaster prevention, reduction, and relief capabilities, enhance the level of safety production governance, and ensure the stable and continuous situation of safety production in the province, thus guaranteeing the high-quality development of the province's economy and society under the new security situation. The Jiangsu Provincial Department of Education has a dedicated Safety and Maintaining Stability Office to guide the construction of school safety risk prevention and control systems, and to guide and coordinate schools in handling various types of major crisis safety incidents.

Related Research

Comparison Study of Emergencies and Crises in universities. The study of emergencies and crises in universities is a discipline that focuses on in-depth research and exploration of potential sudden incidents and crises that might occur both internally and externally in universities. This research aims to analyze and comprehend the causes, characteristics, impacts, and response guidelines of emergencies and crises in universities, so as to provide scientifically valid response measures and management plans to ensure the safety and stability of students and faculty. There is a distinction between emergencies and crises in universities; therefore, clarifying their definitions and relationship is crucial for the subsequent research. This section encompasses the following four aspects: An Overview of Emergencies and Crises in Universities, Emergencies in Universities, Crises in Universities, and The Relationship Between Emergencies and Crises in Universities.

Overview of Emergencies and Crises in universities.

The Emergency Response Plan for Sudden Incidents of Qinghai University stipulates that a sudden incident refers to an event that occurs abruptly and causes or may potentially cause severe harm to the physical health of students and staff,

even leading to death, as well as resulting in damage to public property and detriment to the school's reputation.

In the "Emergency Response Plan for the Prevention and Handling of Sudden Incidents on Campus of the Department of Education Technology and Communication at Zaozhuang University," a campus sudden incident is defined as a public event that takes place either inside or outside the campus, involving the school's students and staff either as the perpetrators or the targets, and leading to the disruption of social and campus order, as well as causing severe harm to individuals and property.

University crisis management primarily encompasses crisis prevention and early warning, crisis education, alleviation and guidance of students' crisis psychology, and the mobilization of social forces (Karina, 2003; Lindsey, 2008; Zhu Xiaobin, 2004).

It can be observed from the above that there is currently no consensus on the definition of sudden incidents in universities. Nevertheless, sudden incidents are generally recognized as having the characteristics of being difficult to predict, requiring urgent handling, causing significant harm, and having a broad impact. In the current universities in Jiangsu, due to various inducing factors, campus sudden incidents also demonstrate the traits of being difficult to prevent and control, prone to escalation, spreading rapidly, causing serious harm to the personal and property interests of students and staff, severely damaging the school's reputation, and generating extremely negative responses both domestically and internationally.

In conclusion, the so-called sudden incidents in universities refer to events that occur abruptly within the campus and may rapidly escalate or intensify on a large scale. These events significantly impact the stability and order within the campus, thereby endangering social security and political stability.

Emergencies in university

Scholars studying emergency management and crisis management often employ concepts such as "sudden events," "emergency events," and "crisis events." In practice, many scholars, either intentionally or unintentionally, do not meticulously distinguish between these concepts, casually using terms like crisis events, sudden events, and emergency events in some articles. Ma Lin (2005) contends that, purely from a conceptual and basic characteristic analysis, there is not a significant disparity between "sudden events" and "crisis events." Nevertheless, he also maintains that

they should be analyzed carefully and not be regarded as identical. Xue Kexun (2004) opines that their most significant difference lies in the scale of the event and the degree of crisis, with crisis events entailing a deeper level of harm, a larger scale, and a greater impact. He provides a diagram as follows:

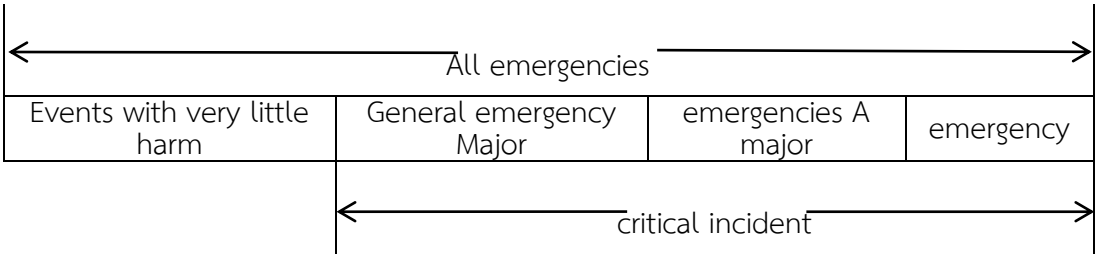

Figure 2.2 The relationship between emergency events and crisis events

Chen Shuwei (2007) contends that while this understanding holds some merit, it is not conducive to differentiating between these two concepts. The most significant disparity between "sudden events" and "crisis events" lies in the fact that the occurrence of a sudden event does not necessarily give rise to a crisis, whereas a crisis might be the outcome of one or a series of sudden events. If administrators adopt effective measures in response to a sudden event and the consequences are contained within the expected range, it cannot be asserted that the administrators are confronted with a crisis. It is evidently incorrect to regard these terms as identical. They should not be employed casually and should be strictly discriminated. In reality, by meticulously scrutinizing the definitions and scopes of these concepts, their relationships can be clarified.

Firstly, it is imperative to distinguish between "emergency events" and "sudden events". Although emergency events can be categorized as general or major, conceptually, emergency events should be regarded as equivalent to "events that occur suddenly". "Events that occur suddenly" are not the same as sudden events. Anything that happens abruptly can be termed an event that occurs suddenly, whether it is a favorable or unfavorable occurrence. Hence, emergency events with minimal or no harm, or even beneficial emergency events, are all "events that occur suddenly". However, they are not sudden events and are not the focus of emergency management or crisis management research. Conversely, sudden events have a

specific definition as a specialized term. Although the definition of sudden events may vary, they all pertain to events that can cause harm. Therefore, the fundamental distinction between "emergency events" and "sudden events" resides in the degree of harm they cause. This point has been widely acknowledged in the academic community, and few scholars engaged in emergency management or crisis management research employ the concept of "emergency events". Instead, the vast majority utilize the concepts of "sudden events" and "crisis events".

Secondly, it is necessary to differentiate between "sudden events" and "crisis events". The renowned crisis management expert Barton (2002) posits that "a crisis (event) is a major event with uncertainty that has the potential to exert negative impacts, and its consequences may inflict substantial harm on the organization, its employees, products, services, assets, and reputation." From this classic definition of a crisis event, it can be discerned that a crisis event emphasizes negative impacts and severe consequences. It is noteworthy that it does not emphasize the suddenness of its occurrence. Eugene (2007) further emphasizes that although crisis events are unpredictable, it does not imply that they are not foreseeable, and suddenness is not an inherent characteristic of crisis events. On the other hand, the term "sudden event" can be immediately determined to possess the characteristic of suddenness based on its literal meaning. As a research focus in crisis management, a sudden event must exhibit the characteristics of negative impacts and severe consequences of a crisis event. Consequently, it can be determined that a sudden event is essentially a crisis event that occurs abruptly.

Crises in university

People have always been attempting to comprehensively and accurately define a crisis. However, in reality, the occurrence of a crisis event encompasses various unpredictable scenarios, making it challenging to summarize in a single statement. Jian Min (2007) believes that only Chinese characters can fully convey the connotation of a crisis, which is "danger and opportunity". Many scholars have diverse understandings and judgments of a crisis from different perspectives:

Hermann: A crisis refers to a situational state in which the fundamental goals of the decision-making entity are threatened, the reaction time for decision-making is limited, and the occurrence is unexpected to the decision-making entity.

Forster: A crisis has four significant characteristics: the requirement for rapid decision-making, a severe shortage of trained staff, a lack of relevant resources and information, and limited time for addressing the crisis.

Rosenthal: A crisis poses a serious threat to the fundamental values and behavioral structure of a social system, and it demands critical decision-making in a time-sensitive and highly uncertain situation.

Barton: A crisis is an event with uncertainty that has the potential to cause negative impacts, and its consequences may cause substantial harm to the organization, its employees, products, assets, and reputation.

From different perspectives, the above definitions may have certain biases to varying degrees. Nevertheless, four characteristics of a crisis can be summarized: unexpectedness, focus, destructiveness, and urgency.

From the perspective of a university, a crisis does not necessarily possess suddenness. Most university crises do occur abruptly, but there are also destructive events in universities that are formed through long-term gestation, such as financial crises or faculty crises. University crises are a broader category than university emergencies. Therefore, it is necessary to meticulously sort out the concepts of university emergencies, crises, emergency management, and crisis management before conducting research on the emergency management capabilities of universities.

The Relationship Between Emergencies in university and Crises in university

The main difference between an unexpected event and a crisis event in universities is that unexpected events always occur suddenly, whereas crisis events do not necessarily occur abruptly. Both unexpected events and crisis events have in common that they pose significant challenges to universities and threaten the normal management order of the institutions. For instance, student suicides are both unexpected events and crisis events. A continuous occurrence of student suicide cases can lead to a reputation crisis for the university, turning into a crisis event for the university's reputation. However, this crisis event for the university's reputation does not occur suddenly; it is not an unexpected event. Another example is a financial crisis event in universities, which is formed after a period of accumulation and does not belong to unexpected events but is a crisis event. For example, the

high faculty turnover crisis in universities in the late 1980s and early 1990s is a crisis event in universities, but clearly, it does not happen suddenly. It has a long-term historical and social background and does not fall within the scope of emergency management research in universities.

So, are there crisis events that do not occur suddenly? The facts prove that there are. For example, an environmental crisis as a crisis event for a country or region does not happen suddenly but is caused by long-term environmental damage. For such a comprehensive environmental crisis event, it is not an environmental unexpected event but is composed of individual and numerous environmental unexpected events. Therefore, crisis events actually have a narrow and broad distinction. In a narrow sense, crisis events refer to unexpected events. In a broad or strict sense, crisis events include not only unexpected events but also all events that have negative impacts and serious consequences that do not necessarily occur suddenly. This can be represented by the following diagram:

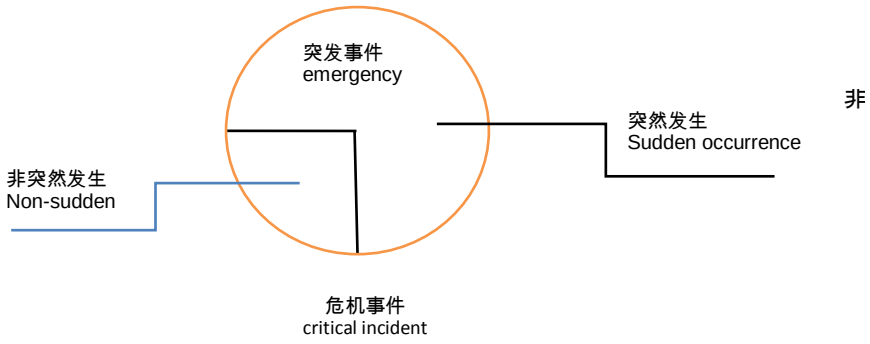

Figure 2.3 Relationship between emergency events and crisis events

Comparison Study of Emergency Management and Crisis Management in Higher Education

In this section, the emphasis is placed on the definitions of emergency management and crisis management within the context of higher education, along with the associated theories. The exploration of these definitions aims to provide a clear understanding of the concepts and their significance in the realm of higher education. Furthermore, the examination of related theories will contribute to a more comprehensive analysis of the subject matter, enabling a deeper understanding

of the dynamics and implications of emergency and crisis management in the educational setting."

Definition of Emergency Management and Crisis Management in Higher Education

The research on emergency management in higher education initially originated from the discipline of public relations. In 1952, renowned American scholars such as Carterrip and Sente pointed out issues like rising costs, increasing public demands, declining government support, shallow media coverage, public criticism, and financial crises in American universities from the perspective of public relations. It was American scholar Coombs who formally proposed and called for attention to a higher education crisis, conducting research on the crisis in world higher education from a macro perspective in the 1980s.

In recent studies on crisis management and emergency management in Chinese universities, we often encounter the following definition: A higher education crisis event refers to an event that suddenly erupts without prior warning, which may seriously threaten the normal order of the university and bring about other adverse consequences. Its characteristics are: Firstly, it is sudden; secondly, it disrupts the teaching and living order of the university and poses a significant threat to the life, property, and safety of teachers and students; thirdly, it has a long-lasting negative impact and causes substantial psychological harm to teachers and students; fourthly, it is difficult to be effectively resolved immediately with the existing human resources and resources of the university; fifthly, it attracts significant social attention. It can be said that this definition and analysis of characteristics are comprehensive and specific, reflecting the characteristics of higher education crisis events. However, a serious conceptual error is made in confusing the concept of a higher education crisis event with that of a higher education emergency event. The definition and characteristics should actually belong to higher education emergency events. By removing phrases such as "suddenly erupts" and "suddenness," it becomes the definition and characteristics of higher education emergency events in the strict sense. And emergency management and crisis management in higher education are the respective management guidelines for higher education emergency events and crisis events.

The object of emergency management in higher education is higher education emergency events, while the object of crisis management in higher education is higher education crisis events. Simply put, emergency management in higher education is for responding to higher education emergency events, while crisis management in higher education is for responding to higher education crisis events. Higher education emergency events are a subset of higher education crisis events, as most higher education crisis events are emergency events. Therefore, emergency management in higher education is a major part and core component of crisis management in higher education. Higher education not only faces crisis events but also emergency events. The current core issue is to study emergency events, making emergency management in higher education an urgent research topic. Although from a more comprehensive perspective, it is necessary to systematically study crisis management in higher education and incorporate emergency management into the scope of crisis management, in fact, many studies under the name of crisis management in higher education are actually dealing with issues related to emergency management in higher education. Therefore, it is more accurate to refer to it as emergency management in higher education to avoid the phenomenon of conceptual confusion.

Related Theories of Emergency Management and Crisis Management in Higher Education

There are two distinct concepts in the field of crisis management: Crisis Management and Emergency Management. In terms of the origin of these two concepts, "Crisis Management" was employed earlier than "Emergency Management". "Crisis Management" is more prevalent in the business sector, whereas "Emergency Management" is more commonly utilized in public management departments.

Robert Heath (2001) contends that the earliest research on crises in Western academia primarily focused on natural disasters. During the transition between the 18th and 19th centuries, the study of crisis management gradually entered the political domain, investigating crisis events confronted by countries and governments. In Western history, the research on crisis management has witnessed two peaks. From the early 1960s to the early 1980s, due to alterations in the global landscape, the Western academic community experienced the first peak in crisis research, and crisis management theory emerged as an independent discipline. Subsequently, crisis

theories were examined from diverse perspectives, such as social conflict theory in sociology, cognitive dissonance theory in psychology, and relative deprivation theory in economics, expanding the study of crises from the political field to the economic, social, and public management domains.

Stephen Fink (1986) published the book "Crisis Management: Planning for the Inevitable", which conducted a comprehensive examination of crisis management and established a systematic analysis framework.

Yang Yun'an (2006) indicated that since the 1990s, regional financial crises that swept through East Asia, Russia, and Latin America; global ecological crises such as mad cow disease, foot-and-mouth disease, and avian influenza; earthquakes in the Hanshin region of Japan and the Bam region of Iran; transnational terrorism crises such as the "9/11" incident in the United States and the Moscow hostage incident in Russia; and public health crises such as the COVID-19 pandemic, SARS epidemic, Spanish flu, and AIDS, have augmented the number of crisis events, leading to a resurgence in government crisis management research. During this period, due to the advancement of public management theory, public crisis management has become a new hotspot for scholars.

Chen Shuwei (2007) believes that "emergency management", theoretically, is actually the application of crisis management theory in government administration and should be a part of the knowledge domain of crisis management. Government departments in China tend to employ the concept of "emergency management" because "emergency" is a specific term utilized by management departments to handle unexpected or urgent events, while "crisis" is commonly employed to describe events or situations that have a significant impact on life and death. Although "emergency management" also emphasizes theoretical construction and highlights every aspect of the management process, such as prevention, response, and recovery, in reality, it is more focused on the practical or operational level of applying this concept.

In conclusion, emergency management and crisis management in universities are two related yet not entirely identical concepts.

Firstly, let's define emergency management and crisis management in higher education. Emergency management in higher education refers to a management approach involving a series of plans and measures formulated by universities to

reduce losses, ensure the safety of teachers and students, and maintain the normal teaching order when emergencies arise. Crisis management pertains to the management activities aimed at preventing, responding to, and resolving crises for the entire organization and its relevant external environment. In terms of scope, emergency management in higher education is narrower, primarily focusing on addressing emergency events within the university. In contrast, crisis management is broader and encompasses multiple aspects such as the internal and external environment of the organization. Crisis management emphasizes external situational analysis, risk prediction, and crisis warning. It needs to comprehensively consider various levels and aspects of the organization, as well as stakeholders related to the organization.

Secondly, in terms of goals, emergency management in higher education concentrates on ensuring the safety of teachers and students and the normal conduct of teaching within the university. This is achieved through the development of emergency plans, organization of emergency drills, training of personnel, and strengthening of facilities and equipment. Conversely, crisis management is more comprehensive. Its goal is to prevent, manage, and recover from crises. It involves risk assessment, early warning mechanisms, and various measures to avert crises before they occur. Once a crisis emerges, crisis management encompasses pre-preparation, information management, crisis public relations, and recovery efforts.

Simultaneously, emergency management and crisis management also differ in terms of strategy. Emergency management in higher education tends to focus on the operational level, emphasizing implementation and emergency response capabilities. It emphasizes a quick response and the ability to handle emergencies, thus placing more emphasis on the development and drills of emergency plans in daily work. Crisis management, on the other hand, emphasizes the decision-making level. It requires thinking from a more macroscopic and strategic perspective and demands more coordination and communication to reach a consensus and form an effective crisis management mechanism.

Furthermore, emergency management and crisis management also vary in terms of the time dimension. Emergency management in higher education is more oriented towards addressing emergencies, dealing with urgent situations, and taking prompt measures to resolve problems. Crisis management, in contrast, focuses on

long-term risks and threats. It requires continuous analysis and assessment of potential crises within and outside the organization and the implementation of corresponding preventive measures.

Finally, in terms of implementation, emergency management in higher education is generally the responsibility of the university's internal emergency management department or similar institutions. It guides and coordinates the emergency work of various departments and personnel through the formulation of relevant systems and plans. Crisis management is more comprehensive and requires the involvement of various resources both within and outside the organization. It demands the participation of multiple stakeholders and the establishment of effective communication and coordination mechanisms.

To summarize, emergency management and crisis management in higher education differ in scope, goals, strategies, time dimension, and implementation level. Emergency management in higher education primarily focuses on addressing emergency events within the university and emphasizes emergency response and quick response capabilities. Crisis management in higher education is more comprehensive, concentrating on crisis prevention, management, and recovery, and requires comprehensive consideration of various issues and factors. Both play crucial roles in the safety management of universities and complement and support each other to ensure the safety and stability within the university.

Research on crisis management in universities has garnered significant attention in recent years. Its aim is to offer effective management guidelines and measures for universities to handle emergencies and crises. These research papers present crucial viewpoints and research findings on emergency management in universities, encompassing problem analysis, countermeasure suggestions, and management approaches. Based on the current research status, the following aspects merit focus when exploring the research directions of emergency management in universities:

Prevention and risk management of crises: Investigate how to identify and recognize potential risks in advance and mitigate the impact of accidents and disasters on universities through risk assessment, early warning mechanisms, monitoring, and prediction technologies. Moreover, it is necessary to study how to

formulate and implement effective risk management guidelines to prevent potential crises and emergencies.

Crisis plans and organizational development: Examine how to develop scientifically sound crisis plans, including organizational structure, command and dispatch, resource allocation, etc., and how to optimize and update these crisis plans. Simultaneously, research is required on the establishment of crisis organizations in universities and related management mechanisms to ensure a prompt and effective response to crises.

Crisis drills and training: Explore how to conduct efficient crisis drills, including various types of drill methods, setting drill objectives, and evaluating drill results. Additionally, investigate how to train crisis management personnel and students to enhance their crisis response and coping capabilities.

Application of information technology in crisis management: Study how to utilize information technology, such as big data, artificial intelligence, the Internet of Things, etc., to support and optimize crisis management in universities. For instance, research can be carried out on establishing intelligent monitoring and early warning systems to improve the accuracy and timeliness of crisis responses.

Interdepartmental cooperation and coordination: Investigate how to establish coordination mechanisms among various departments within universities to facilitate information sharing and collaboration, thereby enhancing the overall effectiveness of crisis management. Additionally, research is needed on the cooperation models between universities and external rescue agencies, government departments, etc., to establish a closer crisis management network.

The role of human factors in crisis management: Examine the influence of human factors, including the psychological states of personnel, organizational culture, communication, and coordination, on crisis management in universities. Incorporate human factors into the crisis management system to optimize guidelines and measures for crisis management from a human perspective.

Evaluation and continuous improvement of crisis management: Explore how to comprehensively and scientifically evaluate crisis management in universities, including the establishment of evaluation indicators and the selection of evaluation methods. Simultaneously, study how to convert evaluation results into measures for

continuous improvement to enhance the capabilities and levels of crisis management in universities.

Liu Li-wen and Wang Ze-ren (2011, p. 360-363) discussed the construction of the university crisis operation plan system in China in their paper "The research on the building of universities crisis operation plan system." It emphasizes the importance of accident management work and how it has become a topic of concern for the government and society. The paper identifies the weakness of accident management work in Chinese universities and discusses the problems that exist in current crisis action plan work. The paper proposes a university action plan system that includes overall planning, specific plans, personnel gathering place plans, and plans for major incidents on campus. Finally, the paper details three points to consider when establishing the university action plan system.

Wang Ya-wei and Zhang Xiao-gang (2018, p. 62 - 64) provided a review of research methods in higher education crisis management in their paper "A Review of Research Methods in Higher Education Emergency Management," including methods and guidelines in crisis management, early warning mechanisms, and crisis plans.

Yang Fei (2017, p. 81 - 85) researched the issues in higher education emergency management and proposed corresponding countermeasures and recommendations in "Research on the Problems and Countermeasures of Higher Education Emergency Management."

Zhang Jin-peng and Wang Qiang (2016, p. 103 - 108) discussed the guidelines and paths of higher education crisis management, including risk assessment, organizational structure development, training and drills, etc., in "Research on the Guidelines and Paths of Higher Education Emergency Management."

Chen Chang-jie and Wang Xiao-dan (2015, p. 51 - 54) introduced the construction and exploration of a master's program in higher education crisis management for handling emergencies on campus, including professional settings and curriculum design, in "The Construction and Exploration of a Master's Degree Program in Emergency Management in Universities."

Xu Qi (2014, p. 67 - 69) conducted research on the guidelines of emergency management in universities, including the application of information technology, the participation of faculty and staff, and emergency training, in "Research on the Guidelines of Emergency Management in Universities."

Zhang Xi-hong (2013, p. 92 - 94) analyzed the current situation of emergency management in universities and proposed corresponding guidelines, such as establishing perfect emergency plans and strengthening emergency education, in "The Current Situation and Countermeasures of Emergency Management in Universities."

Li Hong-wei and Wang Li-guo (2012, p. 60 - 63) researched the construction and application of a decision support system for emergency management in universities to improve the accuracy and efficiency of emergency decision-making in "Research and Practice of Decision Support System for Emergency Management in Universities."

Guo Hai-tao (2011, p. 52 - 54) conducted research on the construction of an emergency management system for handling emergencies in universities, including the establishment of rules and regulations and the division of responsibilities, in "Research on the Construction of an Emergency Management System for Handling Emergencies in Universities."

Wang Shuang and Liu Bo (2010, p. 93 - 98) constructed an evaluation system for emergency management in universities to assess the performance and effectiveness of emergency management in "Research on the Evaluation System of Emergency Management in Universities."

Li Jia, Zhang Hua, and Zhu Chun-jie (2009, p. 53 - 57) conducted research on the emergency handling guidelines for crisis events in universities, including public opinion orientation and public relations guidelines, in "Research on Emergency Handling Guidelines for Crisis Events in Universities."

Deng Yu-cheng and Li Jin-hu (2008, p. 50 - 52) researched the issues in emergency management in universities and proposed corresponding countermeasures and recommendations in "Research on the Problems and Countermeasures of Emergency Management in Universities."

Chen Xiao-yong and Liu Yan (2007, p. 41 - 45) analyzed the current situation of emergency management in universities and proposed corresponding countermeasures and suggestions in "Research on the Current Situation and Countermeasures of Emergency Management in Universities."

Wu Zheng-chun and Xu Zhen-ling (2006, p. 56 - 58) proposed thoughts and countermeasures for emergency management in universities, such as strengthening

the early warning mechanism and improving emergency plans, in "Thoughts and Countermeasures for Emergency Management in Universities."

Yu Pan (2005, p. 57 - 59) analyzed the issues in emergency management in universities and proposed corresponding countermeasures and recommendations in "Issues and Countermeasures in Emergency Management in Universities."

Fan Fu-mei (2004, p. 12 - 14) discussed the exploration of emergency management models in universities, such as command and control models and decentralized coordination models, in "Exploration of Emergency Management Models in Universities."

Liu Xi-ping (2003, p. 30 - 34) conducted research on crisis models in emergency management in universities to improve their ability to respond to emergencies in "Research on Crisis Models in Emergency Management in Universities."

Yang Xue-li, Wang Yue, and Zhang Yong-sheng (2002, p. 57 - 60) proposed thoughts and guidelines for emergency management in universities, such as strengthening emergency education and enhancing emergency organizations, in "Thoughts and Guidelines for Emergency Management in Universities."

Wu Xiao-quan (2001, p. 60 - 63) conducted research on the issues in emergency management in universities and proposed corresponding countermeasures and recommendations in "Research on the Current Situation and Countermeasures of Emergency Management in Universities."

Liu Jian-jun and Wang Jing-sheng (2000, p. 76 - 80) conducted research on the issues in emergency management in universities and proposed corresponding countermeasures and recommendations in "Research on the Problems and Countermeasures of Emergency Management in Universities."

Xu Jun and Liu Guo-hua (1999, p. 55 - 59) conducted research on the issues in emergency management in universities and proposed corresponding countermeasures and recommendations in "Research on the Problems and Countermeasures of Emergency Management in Universities."

In conclusion, the research field of university crisis management covers the entire process from prevention and crisis response to recovery and reconstruction. Future research should focus on the combination of theoretical innovation and practical application, striving to provide more scientific, systematic, and effective crisis management solutions for universities. This requires interdisciplinary

cooperation and comprehensive utilization, integrating theories and methods from various fields such as risk management, organizational management, and technological means to enhance universities' capabilities to respond to emergencies and crises, ensuring the safety and stability of students and faculty members.

Chapter 3
Research Methodology

This research focuses on the current situation of the efficiency of sudden crisis event management in public universities in Nanjing, the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing, and evaluates the suitability and feasibility of the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing. The researcher follows the following procedures:

1. The population / Sample group
2. Research Instruments
3. Data Collection
4. Data Analysis

The details are as follows.

Phase 1: The objective of this phase is to research the current situation of the efficiency of sudden crisis event management in public universities in Nanjing.

The population/Sample Group

The Population

The population of this research was 858 middle-level administrators from 6 different types of public universities in Nanjing, including regular universities and vocational colleges.

The Sample Group

According to the Krejcie and Morgan (1970) sampling table, The sample group of this research was 265 middle-level administrators from 6 different types of public universities in Nanjing, including general universities and vocational colleges. Proportionate sampling and simple random sampling methods were used.

Table 3.1 Lists of university and sample size

No	Public university in Jiangsu	Category	Population	Sample group
1	Southeast University	general universities	178	55
2	Nanjing Normal University	general universities	117	36
3	Jiangsu Open University	general universities	240	74
4	Nanjing Xiao Zhuang University	general universities	71	22
5	Nanjing Vocational College Of Information Technology	vocational colleges	73	23
6	Jiangsu Union Technical Institute	vocational colleges	179	55
	Total		**858**	**265**

According to table 3.1, it shows that Southeast University is a prestigious 985 university affiliated with the Ministry of Education of the People's Republic of China. Nanjing Normal University, Jiangsu Open University, Nanjing Information Technology Vocational College, and Jiangsu United Vocational and Technical College are under the administration of the Education Department of Jiangsu Province. Nanjing XiaoZhuang University is under the jurisdiction of the Education Bureau of Nanjing City. In terms of academic levels, Southeast University, Nanjing Normal University, Jiangsu Open University, and Nanjing XiaoZhuang University are regular undergraduate institutions, while Nanjing Information Technology Vocational College and Jiangsu United Vocational and Technical College are vocational colleges. All 6 universities are located in the city of Nanjing.

Research Instruments

Questionnaire

The instrument used to collect the data for objective 1, which is to investigate the current situation of the efficiency of sudden crisis event management in public universities in Nanjing, is a questionnaire. The questionnaire is designed based on improving the efficiency of sudden crisis event management in public universities in Nanjing in the following aspects: 1) Crisis Prevention, 2) Crisis

Preparedness, 3) Crisis Response, 4) Crisis Recovery, and 5) Learning and Reflection. The questionnaire is composed of two parts:

Part 1: A survey about the personal information of the respondents. It includes gender, the type of university, educational background, academic field, work experience in universities, work experience in crisis management, and experience in participating in the formulation of crisis response plans for higher education institutions.

Part 2: A survey about the current situation of the efficiency of sudden crisis event management in public universities in Nanjing. There are 10 questions for crisis prevention, 10 questions for crisis preparedness, 14 questions for crisis response, 10 questions for crisis recovery, and 10 questions for learning and reflection, totaling 54 questions. The criteria for data interpretation are based on a five-point Likert scale, as follows:

5 indicates the highest level of the efficiency of sudden crisis event management in public universities in Nanjing.

4 indicates a high level of the efficiency of sudden crisis event management in public universities in Nanjing.

3 indicates a medium level of the efficiency of sudden crisis event management in public universities in Nanjing.

2 indicates a low level of the efficiency of sudden crisis event management in public universities in Nanjing.

1 indicates the lowest level of the efficiency of sudden crisis event management in public universities in Nanjing.

The data interpretation for the mean is based on Rensis Likert (1932). The data interpretations are as follows:

4.50 – 5.00 indicates the highest level.

3.50 – 4.49 indicates a high level.

2.50 – 3.49 indicates a medium level.

1.50 – 2.49 indicates a low level.

1.00 – 1.49 express lowest level

Constructing a questionnaire process

The construction process of questionnaire was as follows:

Step 1: Reviewing and analyzing documents, concepts, theories, and research related to improving the efficiency of sudden crisis event management in public universities in Nanjing.

Step 2: Constructing the questionnaire about the current situation of the efficiency of sudden crisis event management in public universities in Nanjing. Then sending the questionnaire outline of questionnaire to the thesis advisors to review and revise the contents according to the suggestions.

Step 3: The index of objective congruence (IOC) of the questionnaire was examined by 5 experts. The Index of Objective Consistency (IOC) ranges from 0.60 to 1.00.

Step 4: Revise the questionnaire based on the experts' suggestions.

Step 5: The questionnaire was distributed to 30 administrators in public universities in Nanjing for try-out. The reliability of the questionnaire was determined using Cronbach's alpha coefficient, with a reliability score of 0.960.

Step 6: The questionnaire was applied to 265 middle-level administrators in public universities in Nanjing.

Data Collection

The data collection for objective 1: to study the current situation of the efficiency of sudden crisis event management in public universities in Nanjing, proceeds as follows:

Step 1: The researcher requested a letter of authorization from the Graduate School of Bansomdejchaopraya Rajabhat University to collect data from 265 middle-level administrators in Nanjing.

Step 2: The researcher distributed the questionnaires to 265 middle-level administrators. A total of 265 questionnaires were returned, accounting for 100%.

Data Analysis

In the data analysis of this research, the researcher analyzes the data using a package program as follows:

Step 1: The personal information of the respondents is analyzed by frequency and percentage, classified by gender, category of university (ordinary universities, vocational universities), educational background, professional title, working years, and crisis response experience of colleges and universities.

Step 2: The current situation of the efficiency of sudden crisis event management in public universities in Nanjing in the following 5 aspects: 1) crisis prevention, 2) crisis preparedness, 3) crisis response, 4) crisis recovery, and 5) learning and reflection, is analyzed by mean value and standard deviation.

Phase 2: the objective of this phase is to formulate the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing.

Key Informant

The interviewees

The interviewees in this research were 12 middle-level administrators from 6 universities in Nanjing, China. The qualifications of interviewees are as follows:

1. Educational background: They should have obtained at least a bachelor's degree, and preferably a master's degree or higher in a relevant field of study.

2. Professional experience: They should have a substantial amount of experience working in the higher education sector, preferably in administrative or managerial roles within universities or related institutions.

3. Management skills: They should possess strong leadership, decision-making, and problem-solving skills. They should also be able to effectively manage resources, handle conflict, and collaborate with various stakeholders.

4. Knowledge of higher education policies and regulations: They should have a deep understanding of the policies, regulations, and guidelines that govern the operation of universities and the higher education system.

5. Communication and interpersonal skills: They should have excellent communication skills, both verbal and written, and the ability to build and maintain positive relationships with staff, faculty, students, and external partners.

6. Suitability and innovation: They should be suitable to changing circumstances and be able to propose and implement innovative ideas and guidelines to improve university operations and performance.

Research Instruments

Structured Interview

The instrument to collect the data for objective 2, which is to establish guidelines for the efficiency of sudden crisis event management in public universities in Nanjing, is structured interviews. Researchers will conduct structured interviews based on factors related to crisis management in public universities, including: 1) crisis prevention, 2) crisis preparedness, 3) crisis response, 4) crisis recovery, and 5) learning and reflection. Research personnel will prepare recording devices such as audio and video to document the conversations, and the data will be transcribed using Nvivo 11. Each participant will undergo an interview ranging from 30 minutes to 1 hour. To summarize the interview content, interview templates will be used to consolidate the interview records. The interviews will be divided into two parts:

Part 1: Based on the five variables mentioned above, middle-level administrators from 6 public universities in Nanjing will be surveyed regarding their perspectives on the current efficiency of sudden crisis event management in public universities in Nanjing.

Part 2: A survey on the efficiency of sudden crisis event management in public universities in Nanjing. Based on relevant theories, researchers will analyze participants' performance and then develop a preliminary plan for the implementation of the efficiency of sudden crisis event management in public universities in Nanjing.

Constructing a structured interview process

Step 1: Design fixed questions for the structured interview based on relevant theories, the five factors influencing the efficiency of sudden crisis event management in public universities in Nanjing and the questionnaire results.

Step 2: Seek advice from professors on the structured interview questions.

Step 3: Randomly select administrators from the six universities in Nanjing for test interviews.

Step 4: Conduct interviews with a total of 12 managers.

Step 5: Record participants' opinions and perceptions of the current efficiency of sudden crisis event management in public universities in Nanjing based on the five variables mentioned above.

Step 6: Record participants' suggestions for improving the efficiency of sudden crisis event management in public universities in Nanjing.

Step 7: Retrieve and analyze the interview results.

Data Collection

The data collection for objective 2: To develop the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing.

Step 1: The researcher adopts the phenomenology method to understand participants' experiences, ideas, and feelings. The process will be recorded using audio and video equipment.

Step 2: The literature research method is employed to summarize the interview results.

Data Analysis

The structured interview conducted on the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing was analyzed by content analysis.

Phase 3: The objective of this phase is to assess the suitability and feasibility of the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing.

Key Informant

Expert group

The experts evaluating the suitability and feasibility of the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing consisted of 6 high-level administrators or senior scholars from universities in

Nanjing and 3 administrators from the government department. In total, there were 9 experts. The qualifications of the experts are as follows:

1. Education Background: The experts possess a master's degree or above in relevant majors and hold the professional title of associate professor or above.

2. Profound knowledge in educational management: The experts should have extensive knowledge in educational management, including higher education policies, regulations, and operational management.

3. Crisis management experience: The experts should have experience in crisis management, being able to identify and resolve potential crises and issues in higher education management.

4. Data analysis skills: The experts need to have the ability to collect, organize, and analyze relevant data to derive accurate assessment results.

5. Communication and collaboration skills: The experts should possess excellent communication and collaboration skills, enabling effective information exchange and cooperation with various stakeholders.

6. Decision-making and problem-solving abilities: The experts should have good decision-making and problem-solving abilities, capable of proposing effective solutions and recommendations for crisis situations.

7. Professional judgment: The experts should have professional judgment skills in the field of educational management, being able to make accurate assessments and decisions based on the actual circumstances.

Research Instruments

Evaluation form

The instrument to collect the data for objective 3, to evaluate the suitability and feasibility of the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing, is the Evaluation form. Researchers will invite 9 experts to conduct evaluations and record the assessment results for comparison and analysis with relevant theories. The researchers will revise and supplement the guidelines based on the assessment results. The assessment process will last for 45 minutes to 1 hour. The evaluation will consist of 4 parts:

Part 1: Based on the five variables mentioned above, investigate the views of 6 high-level administrators or senior scholars from universities in Nanjing City and 3 administrators from the government department of Jiangsu.

Part 2: Conduct a survey on the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing. Based on relevant theories, researchers will analyze the performance of the interviewees and then evaluate the feasibility of implementing the guidelines for the efficiency of sudden crisis event management in public universities in Nanjing.

Part 3: Compare the assessment content with relevant theories.

Part 4: Revise the guidelines.

Constructing a evaluation form process

Step 1: Invite 6 high-level administrators or senior scholars from universities in Nanjing City and 3 administrators from the Jiangsu Provincial Department of Education, totaling 9 experts, to participate in the evaluation, and have the researchers arrange the evaluation venue.

Step 2: Organize the data and materials and present the researchers' findings and guidelines for the efficiency of sudden crisis event management in public universities in Nanjing to the experts.

Step 3: The experts evaluate the interview results and the guidelines for the efficiency of sudden crisis event management in public universities in Nanjing.

Step 4: The researchers conduct statistical analysis on the evaluation results.

The data interpretation for the mean is based on Rensis Likert (1932). The data interpretations are as follows:

4.50 – 5.00 indicates the highest level.

3.50 – 4.49 indicates a high level.

2.50 – 3.49 indicates a medium level.

1.50 – 2.49 indicates a low level.

1.00 – 1.49 indicates the lowest level.

Data Collection

The data collection for objective 3: To evaluate the suitability and feasibility of the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing.

Step 1: The researcher requested requirement letters from the Graduate School of Bansomdejchaopraya Rajabhat University to invite the experts to evaluate the guideline.

Step 2: The researcher distributed the evaluation forms to 6 high-level administrators or senior scholars from universities in Nanjing City and 3 administrators from the Jiangsu Provincial Department of Education. A total of 9 evaluation forms were distributed.

Data Analysis

In this research's data analysis, the researcher analyzes the data using a package program as follows: The evaluation of the suitability and feasibility of the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing is analyzed using Mean and Standard Deviation.

Chapter 4
Results of Analysis

This research was to study the Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing. The data analysis result can be presented as follows:

1. Symbol and abbreviations
2. Presentation of data analysis
3. Results of data analysis

The details are as follows.

Symbol and Abbreviations

N	refers to population
n	refers to sample group
$\overline{X}$	refers to mean
S.D.	refers to standard deviation

Presentation of Data Analysis

Part 1: The analysis result of personal information of respondents, classified by gender and education background. The data is presented in the form of frequency and percentage.

Part 2: The analysis result of the current situation of the efficiency of sudden crisis event management in public universities in Nanjing. The data is presented in the form of mean and standard deviation.

Part 3: The analysis result of the interview contents regarding the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing.

Part 4: The analysis result of the evaluation of the suitability and feasibility of the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing. The data is presented in the form of mean and standard deviation.

Results of Data Analysis

The researcher analyzed the data in 4 parts as follows:

Part 1: The analysis result of personal information of respondents, classified by gender and education background. The data is presented in the form of frequency and percentage.

Table 4.1 Number of people and percentage of respondents

(n = 265)

Classify	Personal Information	Frequency	Percentage
Gender	Male	157	59.25
	Female	108	40.75
	Total	**265**	**100**
Type of universities	ordinary universities	187	70.57
	vocational universities	78	29.43
	Total	**265**	**100**
Education background	Bachelor's degree	65	24.53
	Master's degree	173	65.28
	Doctor's degree	27	10.19
	Total	**265**	**100**
Academic	Junior Title	43	16.23
	Intermediate Title	115	43.40
	Associate Senior Title	68	25.66
	Full Senior Title	36	13.58
	Other	3	1.13
	Total	**265**	**100**
Work experience in university	Less than 1 year	7	2.64
	1-5 years	42	15.85
	6-10 years	45	16.98
	11-20 years	95	35.85
	Over 20 years	76	28.68
	Total	**265**	**100**

Table 4.1 (Continued)

(n = 265)

Classify	Personal Information	Frequency	Percentage
Work experience in crisis management	Less than 1 year	41	15.47
	1-5 years	79	29.81
	6-10 years	61	23.02
	11-20 years	60	22.64
	Over 20 years	24	9.06
	Total	**265**	**100**
Experience in participating in the formulation of crisis response plans for higher education institutions	Yes, actively involved multiple times	88	33.21
	Yes, occasionally involved	101	38.11
	No, but familiar with relevant guidelines	63	23.77
	No, not familiar with relevant guidelines	13	4.91
	Total	**265**	**100**

According to Table 4.1, there are 110 male respondents, accounting for 53.66%, and 95 female respondents, accounting for 46.34%. Regarding the type of institution they belong to, 187 respondents are from regular universities, accounting for 70.57%, while 78 respondents are from vocational colleges, accounting for 29.43%. In terms of educational background, the majority of respondents hold a master's degree, with 173 respondents constituting 65.28%; followed by those with a bachelor's degree, with 27 respondents accounting for 10.19%, and a relatively small number, 25 respondents, hold a doctoral degree, accounting for 9.38%. Concerning job titles, the largest number of respondents hold intermediate titles, with 115 respondents accounting for 43.40%. 114 respondents hold senior titles, accounting for 39.24%, while 46 respondents hold junior titles or other types of titles, accounting for 17.36%. In terms of work experience in universities, the highest number of respondents have 11 to 20 years of experience, with 95 respondents accounting for 35.85%. This is followed by those with over 20 years of experience, with 76 respondents constituting 28.68%. The fewest number of respondents have

less than 1 year of experience, with only 7 respondents accounting for 2.64%. Regarding experience in crisis management, the highest number of respondents have 1 to 5 years of emergency response experience, with 79 respondents accounting for 29.81%. This is followed by those with 6 to 10 years of emergency response experience, with 61 respondents constituting 23.02%. The fewest number of respondents have over 20 years of emergency response experience, with 24 respondents accounting for 9.06%. Among them, 189 respondents have participated in the formulation of emergency response plans for unexpected crisis events, accounting for 81.32%. 56 respondents have not participated in the formulation of emergency response plans but are aware of relevant strategies, accounting for 23.77%. 10 respondents have neither participated in the formulation of emergency response plans nor are aware of the relevant strategies, accounting for 4.91%. It can be seen that the majority are aware of the relevant strategies.

Part 2: The analysis result of the current situation of the efficiency of sudden crisis event management in public universities in Nanjing. The data is presented in the form of mean and standard deviation.

Table 4.2 Mean and standard deviation of the current situation of the efficiency of sudden crisis event management in public universities in Nanjing in five aspects

(n = 265)

NO	The Efficiency of sudden crisis event management in public universities in Nanjing	$\overline{X}$	S.D.	level	Order
1	Crisis Prevention	3.91	0.98	high	5
2	Crisis Preparedness	4.04	0.88	high	3
3	Crisis Response	3.95	0.91	high	4
4	Crisis Recovery	4.23	0.79	high	1
5	Learning and Reflection	4.17	0.79	high	2
	Total	**4.06**	**0.87**	**high**	

According to Table 4.2, it can be seen that the current status of the efficiency of sudden crisis event management in public universities in Nanjing is at a high level ($\overline{X}$ =4.06) in five aspects. Considering the results of this study, the levels from highest to lowest are as follows: crisis recovery has the highest mean ($\overline{X}$ =4.23), followed by learning and reflection ($\overline{X}$ =4.17), crisis prevention has the lowest mean ($\overline{X}$ =3.91).

Table 4.3 Mean and standard deviation of the efficiency of sudden crisis event management in public universities in Nanjing in crisis prevention

(n = 265)

NO	Crisis Prevention	$\overline{X}$	S.D.	level	Order
1	Administrator establishing a security personnel team that combines full-time and part-time employees can effectively prevent sudden crisis events.	3.75	1.13	high	8
2	Administrator establishing an experienced and adequately staffed expert group capable of handling different types of emergencies plays a crucial role in preventing sudden crises.	3.54	1.14	high	10
3	Administrator strengthening the training and assessment of security personnel plays an important role in the crisis prevention stage.	3.71	1.08	high	9
4	Administrator increasing investment in security facilities and equipment plays an important role in the crisis prevention stage.	4.04	0.93	high	3
5	Administrator paying attention to emergency supplies and reserves plays an important role in the crisis prevention stage.	3.90	0.97	high	6

Table 4.3 (Continued)

(n = 265)

NO	Crisis Prevention	$\overline{X}$	S.D.	level	Order
6	The participation of all staff members plays an important role in preventing the occurrence of sudden crisis events.	3.84	1.03	high	7
7	Administrator establishing a three-tier emergency team at the school-department-class level plays an important role in preventing the occurrence of sudden crisis events.	3.91	0.99	high	5
8	The emphasis of school leadership helps in formulating emergency plans to address different crisis scenarios.	4.30	0.72	high	1
9	Administrator increasing investment in safety emergency funds plays an important role in the crisis prevention stage.	3.94	0.96	high	4
10	Administrator conducting objective and reasonable evaluations of crises helps in formulating emergency plans to address different crisis scenarios.	4.16	0.82	high	2
	Total	**3.91**	**0.98**	**High**	

According to Table 4.3, it can be observed that the level of crisis prevention in sudden crisis event management is relatively high level ($\overline{X}$=3.91). Based on the research findings, the levels from highest to lowest are as follows: the highest mean is the school leadership's emphasis on developing emergency plans to respond to different crisis scenarios ($\overline{X}$=4.30), followed by the objectivity and rationality of crisis assessment contributing to the development of emergency plans for different crisis scenarios ($\overline{X}$=4.16), and the lowest is the establishment of an experienced and well - staffed team that can handle different types of emergencies ($\overline{X}$=3.54).

Table 4.4 Mean and standard deviation of the efficiency of sudden crisis event management in public universities in Nanjing in crisis preparedness

(n = 265)

NO	Crisis Preparedness	$\overline{X}$	S.D.	level	Order
1	Administrator offering safety knowledge courses and lectures, conducting security awareness campaigns, can effectively prepare for crisis management.	3.89	1.01	high	6
2	Administrator conducting risk information assessment and archive management can effectively prepare for crisis management.	3.77	1.08	high	10
3	Administrator increasing the proportion of emergency drills and exercises conducted by the entire school's faculty and students can effectively prepare for crisis management.	3.80	1.04	high	8
4	Administrator ensuring that all faculty and students within the school are aware of emergency hotline numbers for various types of emergencies and social reporting channels can effectively prepare for crisis management.	3.82	0.98	high	7
5	Administrator increasing the proportion of faculty and students receiving emergency training can effectively prepare for crisis management.	3.77	0.97	high	9
6	Administrator institutionalizing the duty roster system, strengthening campus patrols and security management to ensure safety order and environment within the campus, can effectively prepare for crisis management.	3.90	0.91	high	5

Table 4.4 (Continued)

(n = 265)

NO	Crisis Preparedness	$\overline{X}$	S.D.	level	Order
7	Administrator establishing comprehensive emergency plans, clarifying emergency response measures and responsibilities for various types of unforeseen crises, can be helpful in dealing with sudden crisis events in universities.	4.26	0.73	high	4
8	Administrator establishing an emergency contact directory that includes key internal personnel and external emergency organizations facilitates timely communication and coordination in the event of emergencies.	4.42	0.69	high	2
9	Administrator establishing an information system and emergency communication network including SMS notification systems, online platforms, emergency broadcasts, etc., facilitates timely delivery and receipt of important information during emergencies.	4.38	0.73	high	3
10	Administrator promoting connections and cooperation between universities and relevant emergency organizations, medical institutions, security agencies, etc., to form a collaborative mechanism and resource sharing, which is beneficial in obtaining more support and assistance.	4.43	0.68	high	1
	Total	**4.04**	**0.88**	**high**	

According to Table 4.4, it can be seen that the level of crisis preparedness in crisis management is relatively high level ($\overline{X}$=4.04). Based on the research results, the levels from highest to lowest are as follows: the highest mean is the establishment of connections and cooperation with relevant emergency agencies, medical institutions, security agencies, etc., to form a linkage mechanism and share resources ($\overline{X}$=4.43), followed by the establishment of an emergency contact directory including key personnel within the university and external emergency agencies, facilitating timely communication and coordination in the event of a crisis ($\overline{X}$=4.42), and the lowest mean is the risk information assessment and archives management ($\overline{X}$=3.54).

Table 4.5 Mean and standard deviation of the efficiency of sudden crisis event management in public universities in Nanjing in crisis response

(n = 265)

NO	Crisis Response	$\overline{X}$	S.D.	level	Order
1	Administrator establishing an emergency command structure and chain of command, clarifying responsibilities and command authority, can effectively respond to sudden crisis events.	4.03	0.91	high	4
2	Administrator organizing timely and effective emergency response and coordinating departments, organizations, and rescue forces can effectively respond to sudden crisis events.	4.00	0.93	high	5
3	Administrator establishing effective communication with the public, addressing their concerns and providing necessary assistance, is one of the key ways to respond to a crisis.	4.06	0.84	high	1
4	Administrator accurately collecting and analyzing information can ensure the scientific and accurate nature of decision-making.	4.05	0.85	high	2

Table 4.5 (Continued)

(n = 265)

NO	Crisis Response	$\overline{X}$	S.D.	level	Order
5	Administrator establishing an emergency notification and alarm mechanism can ensure that individuals are promptly informed of the occurrence of a crisis event and the corresponding action instructions.	3.97	0.91	high	7
6	Administrator strengthening campus security protection work, quickly evacuating, controlling, and isolating hazards, is one of the important tasks for emergency control.	3.82	0.94	high	13
7	Administrator coordinating and cooperating with relevant rescue and medical institutions is one of the key ways for emergency response.	3.98	0.92	high	6
8	Administrator establishing a spokesperson system for news releases is an important measure for managing public opinion crises.	3.75	1.04	high	14
9	Administrator establishing necessary safety and protection measures is an important task for emergency control.	3.85	0.97	high	12
10	Administrator promptly collecting and organizing information related to the crisis event and conducting accurate information analysis and assessment can effectively respond to sudden crisis events.	3.93	0.91	high	10

Table 4.5 (Continued)

(n = 265)

NO	Crisis Response	$\overline{X}$	S.D.	level	Order
11	Administrator organizing effective evacuation and rescue operations after a crisis event can ensure the safety of students and staff.	3.91	0.92	high	11
12	Administrator should engage in timely and effective communication with the media, releasing accurate and transparent information.	4.05	0.85	high	2
13	The supply of emergency and first aid facilities and supplies is the material basis for crisis management.	3.96	0.91	high	8
14	Administrator' communication and collaboration with relevant personnel both inside and outside the school is one of the key aspects of emergency coordination.	3.94	0.90	high	9
	Total	**3.95**	**0.91**	**high**	

According to Table 4.5, it was found that the current situation of crisis response in emergency event management was at a high level ($\overline{X}$=3.95). Considering the results of this research, the aspects ranged from highest to lowest mean were as follows: the highest mean was establishing effective communication channels with the public, addressing their concerns, and providing necessary assistance ($\overline{X}$=4.06). This was followed by accurate information collection and analysis, as well as timely and effective communication with the media, and the mean for both of these aspects were in the second place ($\overline{X}$=4.05). The lowest mean was establishing a spokesperson system. ($\overline{X}$=3.75).

Table 4.6 Mean and standard deviation of the efficiency of sudden crisis event management in public universities in Nanjing in crisis recovery

(n = 265)

NO	Crisis Recovery	$\overline{X}$	S.D.	level	Order
1	Administrator should conduct comprehensive post-event evaluation and analysis, summarize lessons learned, and improve emergency response mechanisms and preventive measures.	3.76	1.05	high	9
2	Administrator should provide necessary psychological counseling and support to teachers, students, and staff, to help them alleviate the psychological trauma and stress caused by the crisis events.	3.68	1.15	high	10
3	Administrator should repair and rebuild damaged campus facilities and equipment, in order to quickly restore normal operations of the campus environment.	4.26	0.70	high	8
4	Administrator should punish responsible individuals and reward relevant personnel.	4.41	0.70	high	1
5	Administrator should make necessary adjustments and arrangements to the school's teaching schedule, based on the impact of the crisis event, in order to minimize the impact on the teaching process.	4.37	0.69	high	4
6	Administrator should strengthen communication and cooperation with the media, convey positive and constructive information, and contribute to the reputation recovery of the school.	4.37	0.74	high	4

Table 4.6 (Continued)

(n = 265)

NO	Crisis Recovery	$\overline{X}$	S.D.	level	Order
7	Administrator should actively publicize the school's crisis response efforts, demonstrating the determination and capabilities of the school, and promote the restoration of the school's image.	4.34	0.76	high	7
8	Administrator should enhance campus security management and preventive measures, repair and reinforce security facilities, and improve the safety awareness and prevention capabilities of teachers, students, and staff, to recover from the impact of the crisis event.	4.35	0.71	high	6
9	Administrator should provide necessary training and support, and communicate with teachers and students, to help them adapt to the new environment after the crisis event.	4.38	0.71	high	2
10	Administrator should collaborate with government, social organizations, and businesses, to facilitate the recovery and development of the campus after the crisis event.	4.38	0.68	high	3
	Total	**4.23**	**0.79**	**high**	

According to Table 4.6, it was found that the current situation of crisis recovery in emergency event management was at a high level ($\overline{X}$=4.23). Considering the results of this research, the aspects ranged from highest to lowest mean were as follows: the highest mean was the punishment of responsible individuals and the reward of relevant personnel ($\overline{X}$=4.41). This was followed by providing necessary

training and support, as well as communicating with students and staff to help them adapt to the new environment after the emergency event ($\overline{X}$=4.38). The lowest mean was providing necessary psychological counseling and support for students, staff, and employees ($\overline{X}$=3.68).

Table 4.7 Mean and standard deviation of the efficiency of sudden crisis event management in public universities in Nanjing in learning and reflection

(n = 265)

NO	Learning and Reflection	$\overline{X}$	S.D.	level	Order
1	Administrator should summarize experiences and lessons learned, identify issues and shortcomings in the events, and provide directions for improvement and prevention in the future.	3.89	0.99	high	9
2	Administrator should encourage sharing experiences among sister institutions, which can promote effective management of emergency crisis events across the entire higher education sector and society.	3.88	0.97	high	10
3	Administrator should collect and document various cases related to the campus, which is beneficial for summarizing experiences and providing references for future work.	3.94	0.90	high	8
4	Administrator should evaluate the school's emergency response effectiveness in crisis events, including leadership decision-making, command organization, information dissemination, evacuation, and rescue efforts. Identify successful experiences and areas for improvement in emergency response, providing reference and guidance for future emergency work.	4.36	0.70	high	2

Table 4.7 (Continued)

(n = 265)

NO	Learning and Reflection	$\overline{X}$	S.D.	level	Order
5	Administrator should improve measures and establish corresponding supervision mechanisms to ensure the effective implementation of improvement measures.	4.36	0.68	high	2
6	Administrator should provide summary reports and updates on the implementation of improvement measures to relevant parties and the public, and promptly respond to concerns and questions from all parties. This contributes to improving and improving the level of management and prevention of emergency crisis events in higher education institutions.	4.31	0.70	high	4
7	Administrator should conduct comprehensive reviews and in-depth analysis of the occurred emergency crisis events, including the causes, processes, response measures, and effectiveness evaluation.	4.37	0.67	High	1
8	Administrator should evaluate the school's communication and information management during crisis events, including the effectiveness of information gathering, processing, and dissemination, as well as communication with teachers, students, staff, and the public. Identify strengths and improvement areas in communication and information management, improving	4.22	0.78	high	5

Table 4.7 (Continued)

(n = 265)

NO	Learning and Reflection	$\overline{X}$	S.D.	level	Order
	accuracy, timeliness, and transparency of information.				
9	Administrator should compile the experiences and lessons learned into a knowledge base for future reference and training. This facilitates sharing experiences and improving the crisis management awareness and capabilities of all employees.	4.20	0.79	high	6
10	Administrator should organize training and simulated exercises based on the lessons learned, improving the emergency response and coordination abilities of faculty and staff. Through practical training, strengthen teamwork and crisis response capabilities.	4.18	0.76	high	7
	Total	**4.17**	**0.79**	**high**	

According to Table 4.7, it was found that the current situation of learning and reflection in crisis event management was at a high level ($\overline{X}$=4.17). Considering the results of this research, the aspects ranged from highest to lowest mean were as follows: the highest mean was conducting comprehensive reviews and in-depth analysis of the occurred crisis events, including the causes, processes, response measures, and effectiveness evaluation ($\overline{X}$=4.37). This was followed by improving measures and establishing corresponding monitoring mechanisms to ensure the effective implementation of the improvements ($\overline{X}$=4.36). The lowest mean was the sharing experiences among sister colleges ($\overline{X}$=3.88).

Part 3: The analysis result of the interview contents regarding the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing.

The structured interview is designed based on the current situation of the efficiency of sudden crisis event management in public universities in Nanjing and the effectiveness of sudden crisis event management in public universities in the following five aspects: 1) crisis prevention, 2) crisis preparedness, 3) crisis response, 4) crisis recovery, 5) learning and reflection. The five questions from the interview are as follows:

1. How to establish an emergency response team? What suggestions do you have for crisis prevention?

2. How to effectively assess and manage risk information and archives? What suggestions do you have for crisis preparedness?

3. How to develop a spokesperson system for news releases? What suggestions do you have for crisis response?

4. How to provide psychological counseling and support for students and staff? What suggestions do you have for crisis recovery?

5. How to foster communication and sharing among sister institutions? What suggestions do you have for the learning and reflection stage after a sudden crisis event occurs?

Table 4.8 Personal information of interviewee

(n = 12)

Interviewee	Education background	Interview Date	Interview Time
Interviewee 1	**Education:** Master's degree **TITLE:** Associate professor **Expertise:** Education Management Work experience: 20 years	Jan 23th ,2024	11:00 am GMT +8 50 minutes
Interviewee 2	**Education:** Doctor's degree **TITLE:** Professor **Expertise:** Financial Management Work experience: 23 years	Jan 29th ,2024	4:00 pm GMT +8 45 minutes
Interviewee 3	**Education:** Doctor's degree **TITLE:** Associate professor **Expertise:** Education Management Work experience: 10 years	Jan 24th ,2024	5:00 pm GMT +8 45 minutes
Interviewee 4	**Education:** Master's degree **TITLE:** Lecturer **Expertise:** Education Management Work experience: 12 years	Jan 24th ,2024	4:00 pm GMT +8 45 minutes
Interviewee 5	**Education:** Master's degree **TITLE:** Associate professor Expertise: Law Work experience: 22 years	Jan 22nd ,2024	11:00 am GMT +8 60 minutes
Interviewee 6	**Education:** Doctor's degree **TITLE:** Associate professor **Expertise:** Education Management Work experience: 15 years	Jan 31st ,2024	10:00 am GMT +8 45 minutes

Table 4.8 (Continued)

(n = 12)

Interviewee	Education background	Interview Date	Interview Time
Interviewee 7	**Education:** Doctor's degree **TITLE:** Professor **Expertise:** Human Resource Management Work experience: 15 years	Jan 25th ,2024	11:00 am GMT +8 45 minutes
Interviewee 8	**Education:** Master's degree **TITLE:** Associate professor **Expertise:** Education Management Work experience: 24 years	Jan 29th ,2024	9:00 am GMT +8 45 minutes
Interviewee 9	**Education:** Master's degree **TITLE:** Associate professor **Expertise:** Public Management Work experience: 17 years	Jan 22nd ,2024	1:00 pm GMT +8 45 minutes
Interviewee 10	**Education:** Doctor's degree **TITLE:** Professor **Expertise:** English Education Work experience: 30 years	Jan 24th ,2024	9:00 am GMT +8 45 minutes
Interviewee 11	**Education:** Master's degree **TITLE:** Directo Expertise: Law Work experience: 19 years	Jan 26th ,2024	10:00 am GMT +8 55 minutes
Interviewee 12	**Education:** Doctor's degree **TITLE:** Professor **Expertise:** Education Management Work experience: 20 years	Jan 26th ,2024	9:00 am GMT +8 45 minutes

According to Table 4.8, it shows that the personal information of 12 interviewees is classified by interviewee, education background, title, interview date, and interview time.

Through conversations with 12 Interviewees, combined with literature review and questionnaire data, the researcher proposes the following development guidelines:

Table 4.9 Guidelines for Improving the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing

Guidelines	How to
Crisis Prevention	1 Establish a crisis management team: Form a professional crisis management team responsible for developing crisis response strategies, coordinating resources, and communicating information to the public. 2 Establish an early warning system: Gather and analyze relevant information to timely identify potential crises and gain valuable time for response. 3 Develop emergency response plans: Create specific emergency response plans for potential crises, outlining response measures and assigning responsibilities. 4 Enhance crisis awareness: Provide training to staff and students to increase their crisis awareness and response capabilities, thus strengthening the overall ability to adapt to crises. 5 Establish information communication mechanisms: Establish effective communication mechanisms to ensure smooth internal communication within the organization and timely understanding of external environmental changes for preparedness. 6 Reserve emergency resources: Stockpile necessary emergency resources such as supplies, equipment, and facilities to ensure prompt deployment during crises. 7 Conduct drills and simulations: Regularly conduct drills and simulations to evaluate and enhance emergency response capabilities, and identify and improve any existing issues.

Table 4.9 (Continued)

Guidelines		How to
	8	Foster good relationships with government, media, and society: Maintain good communication and cooperation with government, media, and society to secure support and assistance in times of crises.
	9	Establish a crisis archive management system: Document and organize records of past crisis events, establishing an archive management system for reference and learning to prevent similar crises.
	10	Continuous learning and improvement: Continuously learn and improve methods and skills for crisis prevention, keep abreast of the latest trends and developments in crisis management domestically and internationally, and elevate the level of crisis prevention.
Crisis Preparedness	1	Conduct risk assessment and archive management: Ensure active participation and collaboration from various departments within the organization to promptly identify, assess, and control different types of risks, thus safeguarding the stable development of the organization.
	2	Emergency plan formulation and updates: Establish comprehensive emergency plans, clearly defining emergency response measures and responsibilities for various types of crises.
	3	Emergency contacts and directories: Create emergency contacts and directories, including key personnel within the school and contact information for external emergency organizations. Ensure timely communication and coordination with relevant individuals in the event of an emergency.
	4	Training and drills: Conduct emergency drills and training to enhance the emergency response capabilities and skills of staff and students. This can include fire evacuation drills, natural disaster response exercises, emergency first aid training, etc.

Table 4.9 (Continued)

Guidelines	How to
	5 Information systems and emergency communications: Establish robust information systems and emergency communication networks to ensure the timely transmission and receipt of critical information during emergency situations. This can include SMS notification systems, online platforms for information dissemination, emergency broadcasting, etc.
	6 Resource reserves and deployment: Establish emergency resource reserves, including first aid equipment, food and water supplies, protective gear, etc. Develop resource deployment plans to ensure the timely mobilization and utilization of various resources during crises.
	7 Post-disaster recovery and psychological support: Develop post-disaster recovery plans, including facility rebuilding, provision of psychological counseling and support, etc. Ensure that staff and students can resume normal life and learning in a timely manner.
	8 Collaboration with external organizations and societal forces: Establish connections and collaboration with relevant emergency organizations, medical institutions, security agencies, etc., to form a coordinated mechanism and resource sharing. Foster cooperation with societal forces to secure additional support and assistance.
Crisis Response	1 Emergency command and coordination: Establish an emergency command structure and chain of command, clearly define the division of responsibilities and command authority. Ensure timely and effective organization of emergency response to crisis events and coordination of departments, agencies, and rescue forces.
	2 Information collection and analysis: Timely gather and organize information related to the crisis event, conduct accurate information analysis and assessment. Ensure the scientific and accurate decision-making.

Table 4.9 (Continued)

Guidelines	How to
	3 Emergency notification and alerts: Use fast and accurate methods to send emergency notifications and alerts to teachers, students, and staff, including SMS, emails, mobile applications, etc. Ensure that individuals are promptly informed of the occurrence of the crisis event and the corresponding action instructions.
	4 Evacuation and rescue: Organize effective evacuation and rescue operations after the crisis event, ensuring the safety of teachers, students, and staff. Provide necessary first aid and medical assistance, and coordinate and cooperate with relevant rescue and medical institutions.
	5 Security protection and control: Strengthen campus security protection and control, and effectively control and isolate hazards. Establish necessary security measures and protection measures to ensure the personal safety and property security of teachers, students, and staff.
	6 Media and public communication: Maintain timely and effective communication with the media, release accurate and transparent information, prevent the spread of rumors and the expansion of panic. Also establish effective communication channels with the public, respond to their concerns, and provide necessary assistance.
	7 Post-event evaluation and recovery: Conduct comprehensive post-event evaluation and analysis after the crisis event ends, summarize experiences and lessons learned, improve emergency response mechanisms and preventive measures. Meanwhile, begin to restore normal order on campus, help teachers, students, and staff overcome the psychological pressure caused by the crisis event, and rebuild a stable and harmonious campus environment.
	8 Collaboration with relevant rescue organizations, government departments, and social forces.

Table 4.9 (Continued)

Guidelines	How to
Crisis Recovery	1 Psychological counseling and support: Provide necessary psychological counseling and support for teachers, students, and staff to help them cope with the psychological trauma and stress caused by the crisis. Establish a mental health service mechanism, including professional psychological counseling, promotional education, diverse service methods, personalized plans, psychological profiles, team building, online learning resources, social practice, enhanced communication and exchange, and cooperation mechanisms. 2 Facility and equipment repair: Repair and rebuild damaged or destroyed campus facilities and equipment, including classrooms, laboratories, dormitories, libraries, etc. Ensure that the campus environment can quickly return to normal operation. 3 Adjusting academic progress: Make necessary adjustments and arrangements for the school's academic progress based on the impact of the crisis. Ensure that teachers and students can smoothly carry out teaching and learning activities, minimizing the impact of the crisis on the academic process. 4 Publicity and image building: Actively publicize the school's response and recovery from the crisis, showcasing the school's determination and capabilities. Strengthen communication a nd cooperation with the media, convey positive and constructive information, and restore the school's reputation and image. 5 Strengthen campus security: Strengthen campus security management and preventive measures, repair and reinforce security facilities, and improve the safety awareness and prevention capabilities of teachers, students, and staff. Conduct regular safety drills and training to enhance emergency response capabilities.

Table 4.9 (Continued)

Guidelines	How to
	6 Teacher training and support: Provide necessary training and support to help teachers adapt to the new teaching environment after the crisis. Communicate and engage with teachers, understand their needs and difficulties, and provide appropriate support and assistance.
	7 Community cooperation and support: Establish cooperative relationships with external communities to gain more support and resources. Collaborate with government agencies, social organizations, and businesses to jointly promote the recovery and development of the campus.
Learning and Reflection	1 Exchange and sharing among sister institutions: By understanding the needs of universities, organizing special lectures, sharing case studies, establishing communication platforms, organizing field visits, conducting collaborative research, developing textbooks and guidelines, establishing linkage mechanisms, and utilizing modern technology, effective communication and sharing of experiences in managing crisis events can be achieved with other universities.
	2 Incident review: Sorting and organizing the process of the crisis event, including the cause, development, actions, and measures taken by relevant parties.
	3 Information collection and organization: Collecting and organizing various data and information related to the crisis event, including on-site survey reports, statements from relevant individuals and witnesses, and documents and records from relevant parties.
	4 Problem identification and analysis: Analyzing the issues and loopholes in the event, including inadequate organizational management and insufficient security measures, as well as the deficiencies and mistakes of relevant parties in responding to the crisis.

Table 4.9 (Continued)

Guidelines	How to
	5 Lesson learned: Drawing lessons from the event, summarizing experiences and lessons learned, and identifying areas and measures that need improvement to prevent similar events from recurring.
	6 Report writing: Based on the analysis and summary, preparing a detailed summary report including the background of the event, the incident process, problem analysis, and improvement recommendations.
	7 Wrap-up meeting: Organizing a wrap-up meeting with relevant personnel to present the summary report, discuss further improvement measures, and develop an action plan.
	8 Driving improvement measures: Based on the summary report and discussions in the meeting, driving relevant departments and individuals to take improvement measures and establishing appropriate monitoring mechanisms to ensure the effectiveness of these measures.
	9 Feedback and communication: Providing the summary report and updates on the implementation of improvement measures to relevant parties and the public, and timely responding to concerns and questions.

According to Table 4.9, the researchers proposed the guidelines for the development of financial aid education in seven aspects, which include 44 measures. There are 7 measures with motivating excellence as the goal, to give full play to the academic promotion function of the scholarship system; 7 measures with promoting educational equity as the core, to give full play to the poverty alleviation function of the bursary system; 6 measures with improving integrity awareness as the key point, to give full play to the moral character shaping function of the student loan system; 7 measures with encouraging self-reliance and self-improvement as the driving force, to give full play to the ability enhancement function of the work-study system; 7 measures with cultivating gratitude consciousness as the approach, to give full play to the thought leading function of the subsidy system; 6 measures with paying

attention to special groups as the guarantee, to give full play to the psychological support function of the tuition reduction system; and 4 measures with taking initiative and action as the mission, to give full play to the main responsibility of universities in financial aid education. The framework of the guidelines is as follows:

Figure 4.1 Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing

Figure 4.2 Guidelines for improving crisis prevention

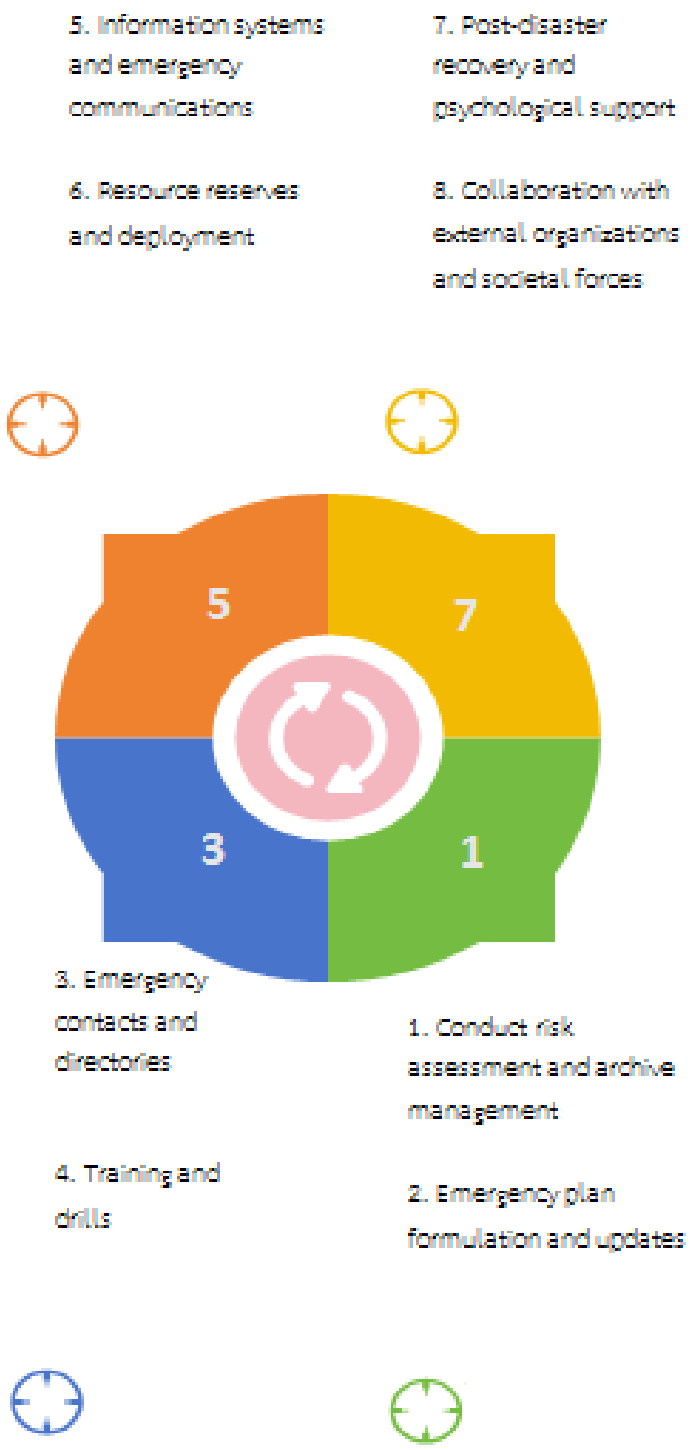

Figure 4.3 Guidelines for improving crisis preparedness

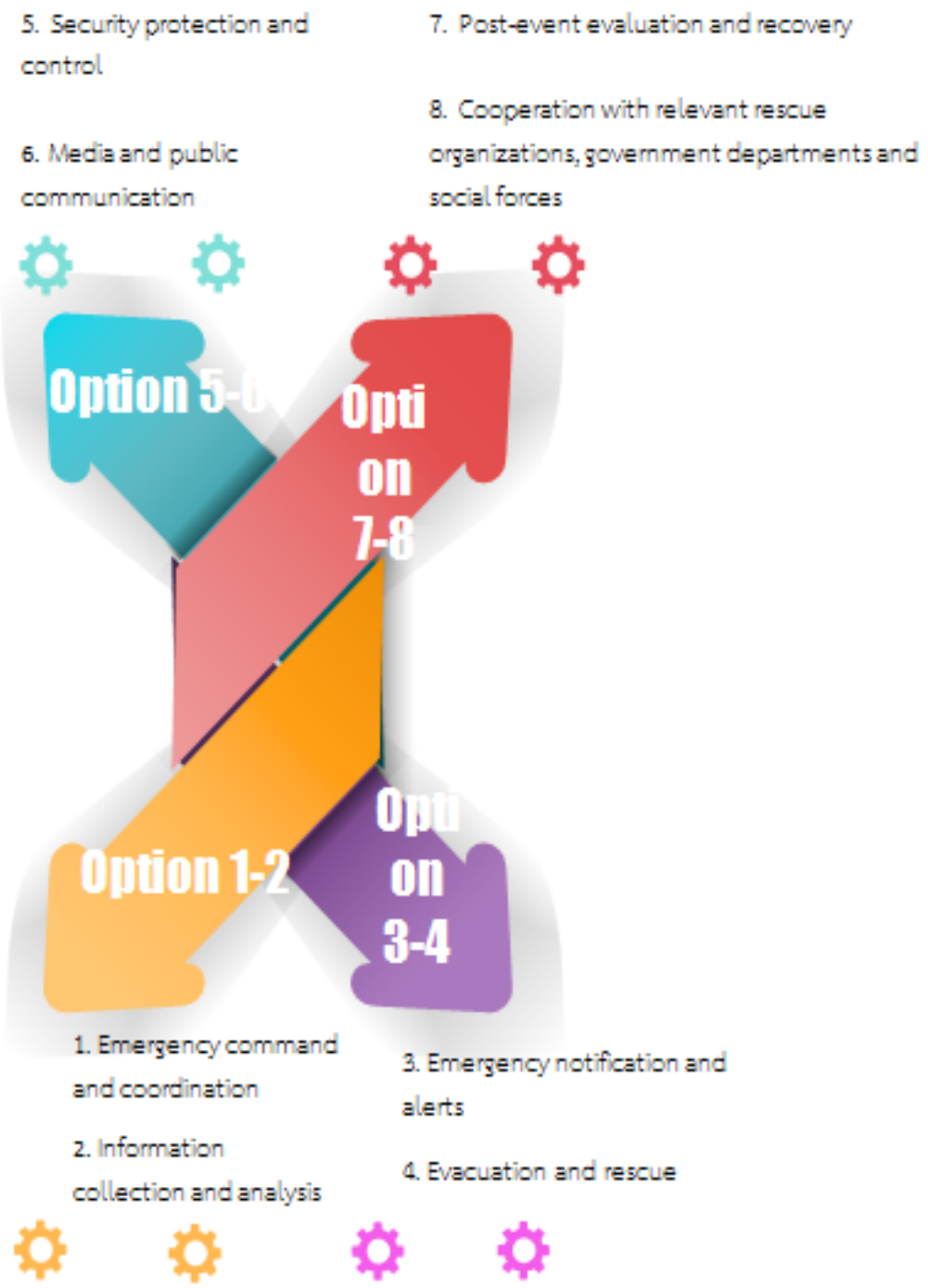

Figure 4.4 Guidelines for improving crisis response

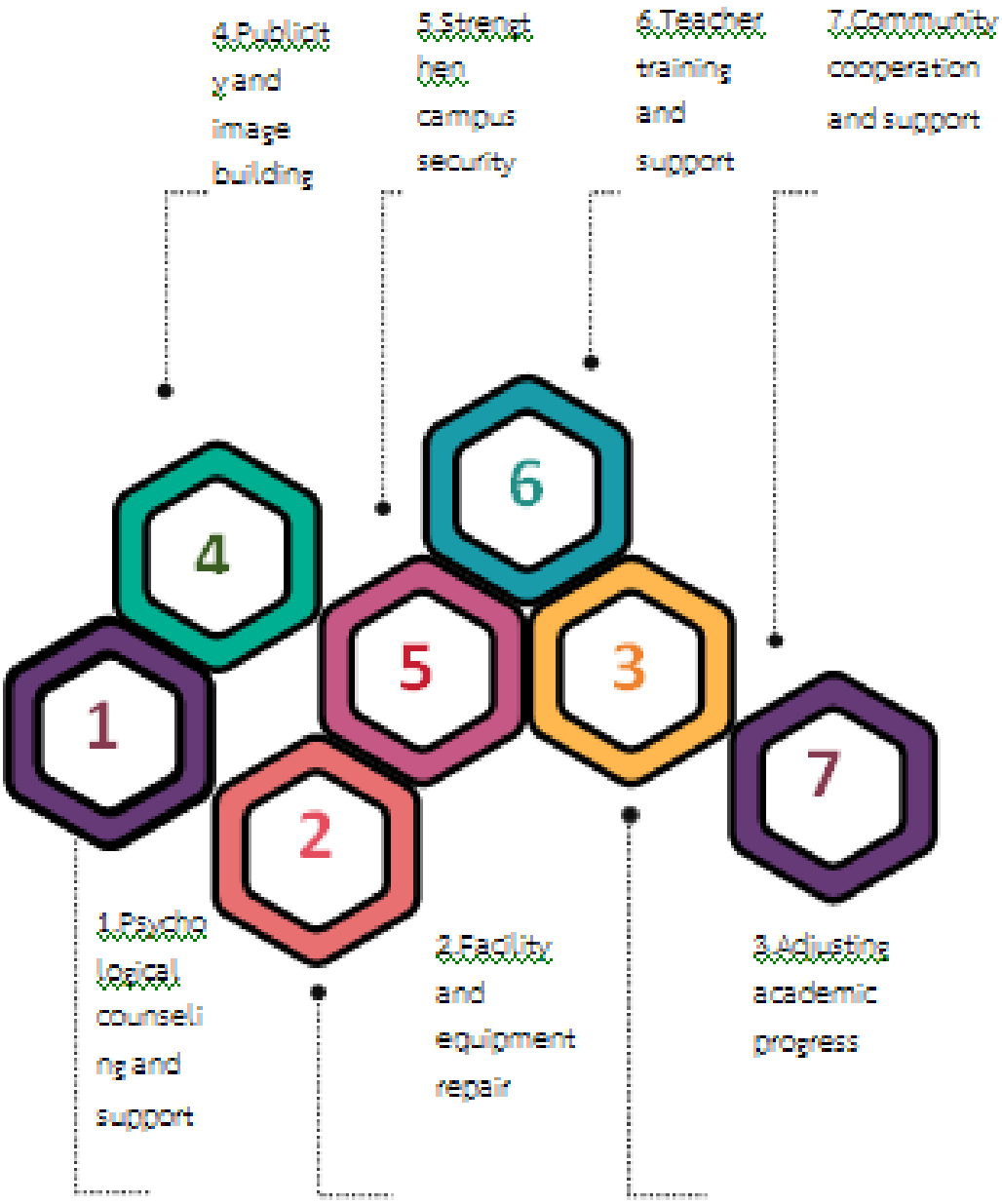

Figure 4.5 Guidelines for improving crisis recovery

Figure 4.6 Guidelines for improving learning and reflection

Part 4: The analysis result of the evaluation of the suitability and feasibility of the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing. The data is presented in the form of mean and standard deviation.

Table 4.10 Mean and standard deviation of the evaluation of the suitability and feasibility of guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing in five aspects

(N = 9)

	Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing	Suitability			Feasibility		
		$\overline{X}$	S.D.	Level	$\overline{X}$	S.D.	Level
1	Crisis prevention	4.63	0.63	Highest	4.06	0.75	High
2	Crisis preparedness	4.67	0.50	Highest	4.03	0.80	High
3	Crisis preparedness	4.64	0.62	Highest	4.10	0.70	High
4	Crisis recovery	4.53	0.64	Highest	4.19	0.72	High
5	Learning and reflection	4.69	0.45	Highest	4.20	0.70	High
	Total	**4.63**	**0.57**	**Highest**	**4.12**	**0.73**	**High**

According to Table 4.10, the suitability and feasibility of the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing in five aspects were at the highest level, with values ranging between 4.00 and 5.00. This indicates that the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing are suitable and feasible.

Table 4.11 Mean and standard deviation of the evaluation of the suitability and feasibility of guidelines in crisis prevention

(N = 9)

	Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing	Suitability			Feasibility		
		$\overline{X}$	S.D.	Level	$\overline{X}$	S.D.	Level
1	Establish a crisis management team: Form a professional crisis management team responsible for developing crisis response strategies, coordinating resources, and communicating information to the public.	4.56	0.73	highest	4.22	0.83	High
2	Establish an early warning system: Gather and analyze relevant information to timely identify potential crises and gain valuable time for response.	4.56	0.73	highest	3.89	0.60	high
3	Develop emergency response plans: Create specific emergency response plans for potential crises, outlining response measures and assigning responsibilities.	4.89	0.33	highest	4.11	0.78	high
4	Enhance crisis awareness: Provide training to staff and students to increase their crisis awareness and response capabilities, thus strengthening the overall ability to adapt to crises.	4.44	0.73	high	4	0.87	high

Table 4.11 (Continued)

(N = 9)

	Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing	Suitability			Feasibility		
		$\overline{X}$	S.D.	Level	$\overline{X}$	S.D.	Level
5	Establish information communication mechanisms: Establish effective communication mechanisms to ensure smooth internal communication within the organization and timely understanding of external environmental changes for preparedness.	4.67	0.71	highest	4.22	0.67	high
6	Reserve emergency resources: Stockpile necessary emergency resources such as supplies, equipment, and facilities to ensure prompt deployment during crises.	4.67	0.50	highest	3.78	0.67	high
7	Conduct drills and simulations: Regularly conduct drills and simulations to evaluate and enhance emergency response capabilities, and identify and improve any existing issues.	4.56	0.73	highest	3.89	0.93	high
8	Foster good relationships with government, media, and society: Maintain good communication and cooperation with government, media, and society	4.78	0.44	highest	3.78	0.83	high

Table 4.11 (Continued)

(N = 9)

	Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing	Suitability			Feasibility		
		$\overline{X}$	S.D.	Level	$\overline{X}$	S.D.	Level
	to secure support and assistance in times of crises.						
9	Establish a crisis archive management system: Document and organize records of past crisis events, establishing an archive management system for reference and learning to prevent similar crises.	4.56	0.73	highest	4.11	0.78	high
10	Continuous learning and improvement: Continuously learn and improve methods and skills for crisis prevention, keep abreast of the latest trends and developments in crisis management domestically and internationally, and elevate the level of crisis prevention.	4.56	0.73	highest	4.56	0.53	high
	Total	**4.63**	**0.63**	**highest**	**4.06**	**0.75**	**high**

According to Table 4.11, the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing are highly suitable and feasible in the aspect of crisis prevention, with a suitability level of 4.63 and a feasibility level of 4.06. This demonstrates the suitability and feasibility of the guidelines in terms of crisis prevention.

Table 4.12 Mean and standard deviation of the evaluation of the suitability and feasibility of guidelines in crisis preparedness

(N = 9)

	Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing	Suitability			Feasibility		
		$\overline{X}$	S.D.	Level	$\overline{X}$	S.D.	Level
1	Conduct risk assessment and archive management: Ensure active participation and collaboration from various departments within the organization to promptly identify, assess, and control different types of risks, thus safeguarding the stable development of the organization.	4.67	0.50	Highest	4.11	0.78	High
2	Emergency plan formulation and updates: Establish comprehensive emergency plans, clearly defining emergency response measures and responsibilities for various types of crises.	4.89	0.33	Highest	4.33	0.87	High
3	Emergency contacts and directories: Create emergency contacts and directories, including key personnel within Emergency contacts and directories: Create	4.33	0.71	High	3.89	0.78	High

Table 4.12 (Continued)

(N = 9)

Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing		Suitability			Feasibility		
		$\overline{X}$	S.D.	Level	$\overline{X}$	S.D.	Level
	emergency contacts and directories, including key personnel within the school and contact information for external emergency organizations. Ensure timely communication and coordination with relevant individuals in the event of an emergency.						
4	Training and drills: Conduct emergency drills and training to enhance the emergency response capabilities and skills of staff and students. This can include fire evacuation drills, natural disaster response exercises, emergency first aid training, etc.	4.67	0.50	Highest	4.00	0.71	High
5	Information systems and emergency communications: Establish robust information systems and emergency communication networks to ensure the timely transmission and receipt of critical	4.78	0.44	Highest	3.89	0.78	High

Table 4.12 (Continued)

(N = 9)

Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing		Suitability			Feasibility		
		$\overline{X}$	S.D.	Level	$\overline{X}$	S.D.	Level
	information during emergency situations. This can include SMS notification systems, online platforms for information dissemination, emergency broadcasting, etc.						
6	Resource reserves and deployment: Establish emergency resource reserves, including first aid equipment, food and water supplies, protective gear, etc. Develop resource deployment plans to ensure the timely mobilization and utilization of various resources during crises.	4.89	0.33	Highest	4.22	0.83	High
7	Post-disaster recovery and psychological support: Develop post-disaster recovery plans, including facility rebuilding, provision of psychological counseling and support, etc. Ensure that staff and students can resume normal life and learning in a timely manner.	4.33	0.71	High	4.11	0.78	High

Table 4.12 (Continued)

(N = 9)

	Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing	Suitability			Feasibility		
		$\overline{X}$	S.D.	Level	$\overline{X}$	S.D.	Level
8	Collaboration with external organizations and societal forces: Establish connections and collaboration with relevant emergency organizations, medical institutions, security agencies, etc., to form a coordinated mechanism and resource sharing. Foster cooperation with societal forces to secure additional support and assistance.	4.78	0.44	Highest	3.67	0.87	High
	Total	**4.67**	**0.50**	**Highest**	**4.03**	**0.80**	**High**

According to Table 4.12, the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing are highly suitable and feasible in the aspect of crisis preparedness, with a suitability level of 4.67 and a feasibility level of 4.03. This implies that the guidelines possess suitability and feasibility with regard to crisis preparedness.

Table 4.13 Mean and standard deviation of the evaluation of the suitability and feasibility of guidelines in crisis response

(N = 9)

	Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing	Suitability			Feasibility		
		$\overline{X}$	S.D.	Level	$\overline{X}$	S.D.	Level
1	Emergency command and coordination: Establish an emergency command structure and chain of command, clearly define the division of responsibilities and command authority. Ensure timely and effective organization of emergency response to crisis events and coordination of departments, agencies, and rescue forces.	4.67	0.71	Highest	4.22	0.83	High
2	Information collection and analysis: Timely gather and organize information related to the crisis event, conduct accurate information analysis and assessment. Ensure the scientific and accurate decision-making.	4.89	0.33	Highest	4.22	0.67	High
3	Emergency notification and alerts: Use fast and accurate methods to send emergency notifications and alerts to teachers, students, and staff, including SMS, emails, mobile applications, etc. Ensure that individuals are promptly informed of the occurrence of the crisis event and the corresponding action instructions.	4.56	0.73	Highest	4.44	0.53	High

Table 4.13 (Continued)

(N = 9)

	Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing	Suitability			Feasibility		
		$\overline{X}$	S.D.	Level	$\overline{X}$	S.D.	Level
4	Evacuation and rescue: Organize effective evacuation and rescue operations after the crisis event, ensuring the safety of teachers, students, and staff. Provide necessary first aid and medical assistance, and coordinate and cooperate with relevant rescue and medical institutions.	4.67	0.50	Highest	3.78	0.44	High
5	Security protection and control: Strengthen campus security protection and control, and effectively control and isolate hazards. Establish necessary security measures and protection measures to ensure the personal safety and property security of teachers, students, and staff.	4.67	0.71	Highest	3.78	0.67	High
6	Media and public communication: Maintain timely and effective communication with the media, release accurate and transparent information, prevent the spread of rumors and the expansion of panic. Also establish effective communication channels with the public, respond to their concerns, and provide necessary assistance.	4.56	0.53	Highest	4.11	0.93	High
7	Post-event evaluation and recovery: Conduct comprehensive post-event evaluation and analysis after the	4.56	0.73	Highest	4.00	0.71	High

Table 4.13 (Continued)

(N = 9)

Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing	Suitability			Feasibility		
	$\overline{X}$	S.D.	Level	$\overline{X}$	S.D.	Level
crisis event ends, summarize experiences and lessons learned, improve emergency response mechanisms and preventive measures. Meanwhile, begin to restore normal order on campus, help teachers, students, and staff overcome the psychological pressure caused by the crisis event, and rebuild a stable and harmonious campus environment.						
8 Collaboration with relevant rescue organizations, government departments, and social forces is also an important component.	4.56	0.73	Highest	4.22	0.83	High
Total	**4.64**	**0.62**	**Highest**	**4.10**	**0.70**	**High**

According to Table 4.13, the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing are highly suitable and feasible in the aspect of crisis response, with a suitability level of 4.64 and a feasibility level of 4.10. This suggests that the guidelines possess suitability and feasibility in terms of crisis response.

Table 4.14 Mean and standard deviation of the evaluation of the suitability and feasibility of guidelines in crisis recovery

(N = 9)

	Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing	Suitability			Feasibility		
		$\overline{X}$	S.D.	Level	$\overline{X}$	S.D.	Level
1	Psychological counseling and support: Provide necessary psychological counseling and support for teachers, students, and staff to help them cope with the psychological trauma and stress caused by the crisis.	4.56	0.53	Highest	4.11	0.93	High
2	Facility and equipment repair: Repair and rebuild damaged or destroyed campus facilities and equipment,including classrooms, laboratories,dormitories, libraries, etc. Ensure that the campus environment can quickly return to normal operation.	4.44	0.53	High	4.33	0.71	High
3	Adjusting academic progress: Make necessary adjustments and arrangements for the school's academic progress based on the impact of the crisis. Ensure that teachers and students can smoothly carry out teaching and learning activities, minimizing the impact of the crisis on the academic process.	4.22	0.83	High	4.56	0.53	Highest

Table 4.14 (Continued)

(N = 9)

	Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing	Suitability			Feasibility		
		$\overline{X}$	S.D.	Level	$\overline{X}$	S.D.	Level
4	Publicity and image building: Actively publicize the school's response and recovery from the crisis, showcasing the school's determination and capabilities. Strengthen communication and cooperation with the media, convey positive and constructive information, and restore the school's reputation and image.	4.56	0.73	Highest	4.22	0.44	High
5	Strengthen campus security: Strengthen campus security management and preventive measures, repair and reinforce security facilities, and improve the safety awareness and prevention capabilities of teachers, students, and staff. Conduct regular safety drills and training to enhance emergency response capabilities.	4.78	0.44	Highest	3.89	0.78	High
6	Teacher training and support: Provide necessary training and support to help teachers adapt to the new teaching environment after the crisis. Communicate and engage with teachers, understand their needs and difficulties, and provide appropriate support and assistance.	4.56	0.73	Highest	3.89	0.78	High

Table 4.14 (Continued)

(N = 9)

	Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing	Suitability			Feasibility		
		$\overline{X}$	S.D.	Level	$\overline{X}$	S.D.	Level
7	Community cooperation and support: Establish cooperative relationships with external communities to gain more support and resources. Collaborate with government agencies, social organizations, and businesses to jointly promote the recovery and development of the campus.	4.56	0.73	Highest	4.33	0.87	High
	Total	**4.53**	**0.64**	**Highest**	**4.19**	**0.72**	**High**

According to Table 4.14, the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing are highly suitable and feasible in the aspect of crisis recovery, with a suitability level of 4.53 and a feasibility level of 4.19. This indicates that the guidelines have suitability and feasibility in terms of crisis recovery.

Table 4.15 Mean and standard deviation of the evaluation of the suitability and feasibility of guidelines in learning and reflection

(N = 9)

	Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing	Suitability			Feasibility		
		$\overline{X}$	S.D.	Level	$\overline{X}$	S.D.	Level
1	Exchange and sharing among sister institutions: By understanding the needs of universities, organizing special lectures, sharing case studies, establishing communication platforms, organizing field visits, conducting collaborative research, developing textbooks and guidelines, establishing linkage mechanisms, and utilizing modern technology, effective communication and sharing of experiences in managing crisis events can be achieved with other universities.	4.89	0.33	Highest	4.33	0.71	High
2	Incident review: Sorting and organizing the process of the crisis event, including the cause, development, actions, and measures taken by relevant parties.	4.33	0.71	High	4.11	0.93	High
3	Information collection and organization: Collecting and organizing various data and information related to the crisis event, including on-site survey reports, statements from relevant individuals and witnesses, and	4.67	0.50	Highest	4.22	0.67	High

Table 4.15 (Continued)

(N = 9)

	Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing	Suitability			Feasibility		
		$\overline{X}$	S.D.	Level	$\overline{X}$	S.D.	Level
	documents and records from relevant parties.						
4	Problem identification and analysis: Analyzing the issues and loopholes in the event, including inadequate organizational management and insufficient security measures, as well as the deficiencies and mistakes of relevant parties in responding to the crisis.	4.78	0.44	Highest	4.56	0.53	Highest
5	Lesson learned: Drawing lessons from the event, summarizing experiences and lessons learned, and identifying areas and measures that need improvement to prevent similar events from recurring.	4.89	0.33	Highest	3.67	0.71	High
6	Report writing: Based on the analysis and summary, preparing a detailed summary report including the background of the event, the incident process, problem analysis, and improvement recommendations.	4.33	0.71	High	4.44	0.73	High
7	Wrap-up meeting: Organizing a wrap-up meeting with relevant personnel to present the summary report, discuss further improvement measures, and develop an action plan.	4.78	0.44	Highest	4.22	0.67	High

Table 4.15 (Continued)

(N = 9)

	Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing	Suitability			Feasibility		
		$\overline{X}$	S.D.	Level	$\overline{X}$	S.D.	Level
8	Driving improvement measures: Based on the summary report and discussions in the meeting, driving relevant departments and individuals to take improvement measures and establishing appropriate monitoring mechanisms to ensure the effectiveness of these measures.	4.67	0.71	Highest	4.22	0.67	High
9	Feedback and communication: Providing the summary report and updates on the implementation of improvement measures to relevant parties and the public, and timely responding to concerns and questions.	4.89	0.33	Highest	4.00	0.71	High
	Total	4.69	0.45	Highest	4.20	0.70	High

According to Table 4.15, the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing are highly suitable and feasible in the aspect of learning and reflection, with a suitability level of 4.69 and a feasibility level of 4.20. This indicates that the guidelines have suitability and feasibility in terms of learning and reflection.

Chapter 5
Discussion Conclusion and Recommendations

The objectives of this research include: 1) To investigate the current status of the efficiency of sudden crisis event management in public universities in Nanjing. 2) To propose the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing. 3) To assess the suitability and feasibility of the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing. According to the analysis of relevant theories and research, the variables involved in improving the efficiency of sudden crisis event management in public universities in Nanjing primarily encompass five aspects as follows: 1. Crisis prevention; 2. Crisis preparedness; 3. Crisis response; 4. Crisis recovery; 5. Learning and reflection. The research population consisted of 858 middle-level administrators from six distinct types of public universities in Nanjing, encompassing regular universities and vocational colleges. The interview groups in this research were middle-level administrators from 6 universities in Nanjing. The experts for assessing the suitability and feasibility of the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing comprise six high-level managers or senior scholars from universities in Nanjing and three administrators from the government department. The details are as follows.

Conclusion

The research focuses on the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing. The researcher summarizes the conclusion into three parts, as follows:

Part 1: The current situation of the efficiency of sudden crisis event management in public universities in Nanjing.

Part 2: The guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing.

Part 3: The suitability and feasibility of the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing.

Part 1: The current situation of the efficiency of sudden crisis event management in public universities in Nanjing

The efficiency of sudden crisis event management in public universities in Nanjing is at a relatively high level in five aspects regarding the current status. Considering the results of this study, the levels from highest to lowest are as follows: Crisis recovery has the highest level, followed by learning and reflection. Crisis prevention has a relatively lower level, with crisis response being slightly higher, and crisis preparedness being at an intermediate level.

Crisis prevention was at a relatively high level. Considering the results of this research, the levels from highest to lowest are as follows: The highest mean is the school leadership's emphasis on developing emergency plans to respond to different crisis scenarios, followed by the objectivity and rationality of crisis assessment contributing to the development of emergency plans for different crisis scenarios, and the lowest is the establishment of an experienced and well-staffed team capable of handling different types of emergencies.

Crisis preparedness was at a relatively high level. Considering the results of this research, the aspects ranked from highest to lowest level are as follows: The highest level is the establishment of connections and cooperation with relevant emergency agencies, medical institutions, security agencies, etc., to form a linkage mechanism and share resources. This is followed by the establishment of an emergency contact directory including key personnel within the university and external emergency agencies, facilitating timely communication and coordination in the event of a crisis. The lowest level is the risk information assessment and archives management.

Crisis response was at a relatively high level. Considering the results of this research, the aspects ranked from highest to lowest level are as follows: The highest level is establishing effective communication channels with the public, addressing their concerns, and providing necessary assistance. This is followed by accurate information collection and analysis, as well as timely and effective communication with the media, with both aspects having average values in the second place. The lowest level is the establishment of a spokesperson system.

Crisis recovery was at a relatively high level. Considering the results of this research, the aspects ranked from highest to lowest level are as follows: The highest

level is the punishment of responsible individuals and the reward of relevant personnel. This is followed by providing necessary training and support, as well as communicating with students and staff to help them adapt to the new environment after the emergency event. The lowest level is providing necessary psychological counseling and support for students, staff, and employees.

Learning and reflection was at a relatively high level. Considering the results of this research, the aspects ranked from highest to lowest level are as follows: The highest level is conducting comprehensive reviews and in-depth analysis of the occurred crisis events, including the causes, processes, response measures, and effectiveness evaluation. This is followed by improving measures and establishing corresponding monitoring mechanisms to ensure the effective implementation of the improvements. The lowest level is the sharing of experiences among sister colleges.

Part 2: The guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing

The guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing in five aspects, which contain 42 measures. There are 10 measures for Crisis prevention, 8 measures for Crisis preparedness, 8 measures for Crisis response, 7 measures for Crisis recovery, and 9 measures for learning and reflection.

Crisis prevention consisted of 10 measures: 1) Establish a crisis management team. 2) Establish an early warning system. 3) Develop emergency response plans. 4) Enhance crisis awareness. 5) Establish an information communication mechanism. 6) Stockpile emergency resources. 7) Conduct drills and simulations. 8) Develop good relationships with the government, media, and society. 9) Establish a crisis archives management system. 10) Continuously learn and improve.

Crisis preparedness consisted of 8 measures: 1) Conduct risk assessment and archive management. 2) Establish and update emergency response plans. 3) Designate emergency contacts and maintain a contact list. 4) Provide training and drills. 5) Implement information systems and emergency communication. 6) Stockpile and allocate resources. 7) Focus on post-disaster recovery and psychological counseling. 8) Collaborate with external organizations and social forces.

Crisis response consisted of 8 measures: 1) Emergency command and coordination. 2) Information gathering and analysis. 3) Emergency notifications and alerts. 4) Evacuation and rescue operations. 5) Safety protection and control. 6) Media and public communication. 7) Post-event evaluation and recovery. 8) Collaboration with relevant rescue organizations, government departments, and social forces.

Crisis recovery consisted of 7 measures: 1) Psychological counseling and support. 2) Facility and equipment repairs. 3) Adjustments to academic progress. 4) Publicity and image shaping. 5) Strengthen campus security. 6) Teacher training and support. 7) Community cooperation and support.

Learning and reflection consisted of 9 measures: 1) Enhance communication and sharing among sister institutions. 2) Analyze events and incidents. 3) Collect and organize information. 4) Identify and analyze problems. 5) Summarize lessons learned. 6) Prepare reports. 7) Conduct summary meetings. 8) Drive improvement measures. 9) Provide feedback and communication.

Part 3: The suitability and feasibility of the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing

The guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing are at the highest level of suitability in 5 aspects, with values between 4.50 and 5.00. The feasibility of the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing is at a high level in 5 aspects, with values ranging from 3.50 to 4.49. This means the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing are have suitability and feasibility.

The suitability of crisis prevention was at the highest level with a value of 4.63, and the feasibility of crisis prevention at the high level with a value of 4.06.

The suitability of crisis preparedness was at the highest level with a value of 4.67, and the feasibility of crisis preparedness at the high level with a value of 4.03.

The suitability of crisis response was at the highest level with a value of 4.64, and the feasibility of crisis response at the high level with a value of 4.10.

The suitability of crisis recovery was at the highest level with a value of 4.53, and the feasibility of crisis recovery at the high level with a value of 4.19.

The suitability of learning and reflection was at the highest level with a value of 4.69, and the feasibility of learning and reflection at the high level with a value of 4.20.

Discussion

The research in the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing. The researcher summarizes the conclusion into 3 parts, details as follows:

Part 1: the current situation of the efficiency of sudden crisis event management in public universities in Nanjing.

Part 2: the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing.

Part 3: the suitability and feasibility of the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing.

Part 1: the current situation of the efficiency of sudden crisis event management in public universities in Nanjing

The efficiency of sudden crisis event management in public universities in Nanjing is at a relatively high level in five aspects. Based on the research results, the levels from highest to lowest are as follows: Crisis recovery has the highest level, followed by learning and reflection, while crisis prevention has the lowest level. The well-known crisis management scholar and organizational scientist Ian Mitroff mentioned in his book "Managing Crises Before They Happen: What Every Executive and Manager Needs to Know About Crisis Management" that crisis management in higher education needs to consider multiple factors to enhance the ability and effectiveness of higher education institutions in responding to crises.

Crisis prevention is at a relatively high level. This is because: Firstly, senior administrators attach great importance to the management of sudden crisis events, and the organization or team has a clear understanding of the importance of crisis prevention. Secondly, the organization or team adheres to the principles of openness, transparency, and learning, encouraging employees to proactively report potential risks and crises, and providing effective feedback and support. Thirdly, there is sufficient investment in emergency materials and funds. Fourthly, the objectivity

and reasonableness of crisis assessment play a crucial role in developing emergency plans to address different crisis scenarios. However, there are weaknesses in team building, primarily manifested as follows: 1) Lack of training and preparation, as team members may not have received sufficient crisis management training, lacking experience and skills in crisis response. 2) Unclear roles and responsibilities, with an unclear allocation of roles and responsibilities among team members, leading to decision-making difficulties and communication barriers. 3) Lack of effective communication channels, resulting in delayed information transmission and erroneous decision-making. 4) Lack of emergency plans and drills, as the team may not have developed comprehensive emergency plans and lacks regular drills and validations, resulting in less flexibility and agility in responding to real crises. This is related to the view of Lu Wen Hui (2006, p35-37), who believes that a good organizational structure is a necessary guarantee for effective crisis management. Universities should establish a crisis management body - the Crisis Management Committee - based on their own circumstances. The committee should consist of key departments such as the office, research office, news office, on-site office, consulting office, logistics office, and assessment office, and undertake all responsibilities from crisis early warning to crisis evaluation. Lie Wang (2020, pp. 244 - 252) centers on the deficiencies of crisis management in colleges and universities and deliberates on new approaches to overcome these shortcomings in the article "Research on the Crisis Management Problems and Countermeasures of Colleges and Universities in Micro Age". The author suggests commencing from five aspects: establishing new thinking, setting up new mechanisms, adopting new methods, formulating new guidelines, and implementing new education. The article accentuates the significance of efficient crisis management in the micro age for colleges and universities. According to the crisis management model proposed by Seeger and Greenberg, crisis prediction and identification are crucial factors influencing educational crisis management. They contend that universities need to possess the capability to predict and identify potential crises, encompassing monitoring environmental alterations, analyzing risk factors, and evaluating internal organizational matters. This demands that universities pay heed to the dynamic changes in social, political, economic, and other aspects, and promptly discern potential crisis signs. Based on this, scholars both at home and abroad have

conducted extensive research and development on crisis prediction and identification. In their study "Campus emergency management capability based on fuzzy comprehensive evaluation", Minghua Wu, Jing Zhao, and Taowei Zhang (2016, p. 863 - 874) assert that in recent years, campus emergencies have occurred frequently, and emergency management capabilities have not only become a focus of public attention but also an inescapable management issue for universities. They employ the analytic hierarchy process to determine the weights of various evaluation indicators and establish a campus emergency management capability evaluation model through fuzzy comprehensive evaluation. Emergency management capabilities are divided into five levels, and all secondary indicators are evaluated using the expert evaluation method. Then, evaluation vectors for primary indicators are obtained through calculations. Finally, the level evaluation vector of the campus emergency management capability is derived based on the weight vector of the main indicators. The management structure refers to a team composed of designated professionals appointed by the university, aiming to address and manage potential crisis events. This team is responsible for establishing and implementing crisis response plans, which include prevention, response, and recovery phases. They are in charge of developing policies, procedures, and protocols to ensure the university can respond timely and accurately to various crises, safeguarding the safety of students and ensuring the normal operation of the institution. They collaborate with departments such as campus security, public relations, and the media to provide emergency response, communication, and coordination, with the aim of minimizing the impact of crises and ensuring efficient crisis management.

Crisis preparedness is at a relatively high level. This is because: 1) Most schools have established emergency plans, clarifying emergency response measures and the division of responsibilities for various types of crises. 2) Schools generally offer safety knowledge courses and lectures to promote safety awareness. 3) Emergency contact directories have been established, including key personnel within the school and external emergency agencies, to ensure that all students and staff are aware of emergency hotline numbers and social reporting channels, allowing for effective crisis management preparation. 4) Universities have established connections and partnerships with relevant emergency agencies, medical institutions, and security organizations, forming a collaborative mechanism and resource sharing.

5) Duty shift systems have been normalized to strengthen campus patrols and safety management. All of the above ensure the safety order and environment on campus, allowing for effective crisis management preparation. However, there is still room for improvement in risk information assessment and record management, as well as increasing the proportion of exercises for different types of crisis events among all students and staff, as mentioned by Professor Chen Changgui (2003, p. 3-4) from the Institute of Education Sciences at Sun Yat-sen University. In his paper "A New Mechanism for Managing Emergency Incidents in Universities", he believes that the university management of crisis events should include a rapid decision-making and research system, an efficient and unified command system, a timely information dissemination and feedback system, a necessary expert consultation system, and a strong social support system. Guo Ji, Gao Xiaoping, Li Chengwei, Shen Ronghua, and Liu Yandan (2006, pp. 6 - 9) in "Research Report on the Construction of Emergency Management Mechanism in Universities" suggest that the current focus of emergency management work in Chinese universities should be on strengthening mechanism innovation and scientifically formulating and implementing the following specific measures: innovative mechanisms for public opinion management in universities; the establishment of a flat information transmission network; the establishment of a daily emergency management operation mechanism; the effective integration of university emergency management into the government emergency management mechanism; the establishment of a sound organizational system to achieve public governance of university emergency management; and the strengthening of emergency psychological support.

Crisis response is at a relatively high level. This is because universities have realized the importance of the media's power and have established effective communication with the public. They respond to their concerns and provide necessary assistance. In the event of a crisis, universities attach importance to communication and collaboration with relevant individuals both within and outside the campus. They also organize timely and effective responses to crisis events, coordinating various departments, institutions, and rescue forces. Furthermore, universities have established necessary safety and protection measures to ensure the personal safety and property security of students, faculty, and staff. Although universities recognize the importance of the media's power, there are still notable

issues in establishing a spokesperson system, responding to public opinion crises, and engaging in timely and effective communication with the media. This aligns with the theory discussed by Yang Jiang (2018, pp. 531-534) in the paper "Research on Guidelines in Response to College Network Public Opinion from the Perspective of Crisis Management". In this paper, the author explores crisis management strategies for handling online public opinion in universities, including early warnings, educational guidance, and crisis response. Studying strategies for addressing online public opinion from the perspective of crisis management has become a necessity and urgency for universities. The paper discusses the characteristics of online public opinion in universities and analyzes the necessity of crisis management for online public opinion. It explores strategies for addressing online public opinion from the perspectives of work mechanisms, early warnings, educational guidance, and crisis response. Ma Ye (2007, pp. 67 - 78) analyzed the causes of emergencies in universities, dividing them into external and internal causes. Firstly, the external causes include: 1) the negative impacts of the market economy; 2) the complex socialization of the surrounding environment; 3) the potential crises arising from the information advantages of the internet; 4) the infiltration and destruction of universities by hostile forces at home and abroad. Secondly, the internal causes include: 1) new problems brought about by the socialization reform of university logistics; 2) problems among the students themselves; 3) the rapid increase in the number of students and the complexity of the student source; 4) the increase in impoverished students and the increased pressure on graduate employment. Ma Ye (2007) deliberates on the composition of crisis management teams in higher education institutions. He contends that crisis management teams in universities are essentially decision-making teams responsible for making major decisions and determinations, such as announcing the entry into an emergency state and initiating emergency and recovery plans. The crisis management team also serves as an advisory group, composed of specialists with a profound understanding of crisis management who can provide evaluations for specific cases. Its aim is to coordinate and utilize various resources both within and outside the university to minimize the negative impact of crisis events on the school and its students. The crisis management team in higher education institutions should be established before any crisis or crisis event occurs rather than being formed only when a crisis emerges. It

should be a permanent institution or department specifically responsible for managing crises in the school. However, through investigations, it is discovered that almost no higher education institutions have dedicated crisis management structures, as they are generally integrated into the existing organizational structures. As a permanent institution within higher education institutions, the crisis management team operates throughout the entire process of crisis management. It holds a central position in managing crises and bears substantial responsibilities. The success or failure of crisis management, whether it leads to safety and stability or even opportunities, primarily depends on the correct decision-making of the crisis management team and the work carried out throughout the crisis management process. The members of the crisis management team are the key personnel in the overall crisis management of the university. Before a crisis, they are the planners of crisis management. During a crisis, they organize other relevant departments and personnel to jointly respond to the crisis based on the situation. After a crisis, they also need to conduct crisis recovery and evaluation management, draw lessons, summarize experiences, and improve crisis management. Each member is an important part of crisis management, and none can be absent. They form a team and require a spirit of cooperation. They also need to continuously enhance their knowledge and skills in crisis management through learning, training, and exercises. Nevertheless, under the existing management model in higher education institutions, how to carry out organizational reform is a complex issue that requires practical considerations and overall coordination in order to truly establish an effective emergency management team in universities.

Crisis recovery is at a relatively high level. This is because universities have clear measures for punishing and rewarding responsible individuals. They collaborate with the government, media, social organizations, and businesses, particularly strengthening communication and cooperation with the media to convey positive and constructive information that benefits the reputation recovery of the university. They also repair and rebuild damaged campus facilities and equipment, facilitating the quick restoration of normal campus operations. Depending on the impact of the crisis event, necessary adjustments and arrangements are made to the school's teaching schedule, minimizing the disruption caused by the crisis on the teaching process. However, universities still need to provide necessary psychological

counseling and support to students, faculty, and staff to help them cope with the psychological trauma and stress caused by the crisis event. They also need to conduct comprehensive post-event evaluations and analyses, and provide training and support to faculty and students. These aspects are not adequately addressed. This aligns with the theory proposed by Coombs, W. T. (2007, pp. 163-176) in "Protecting organization reputations during a crisis: The development and application of situational crisis communication theory". The paper introduces the Situational Crisis Communication Theory (SCCT), emphasizing the importance of actively responding to public concerns and criticisms during a crisis in order to restore organizational reputation. Benoit, W. L. (1995, p.119 - 134) discussed image restoration guidelines in "Accounts, excuses, and apologies: A theory of image restoration guidelines", exploring how organizations can restore damaged reputations through different communication methods and restoration guidelines during a crisis. Seeger, M. W. (2006, p.232 - 244) summarized the best practices in crisis communication, including timely information updates, transparency, empathy, and coordinated actions, through research conducted by an expert panel in "Best practices in crisis communication: An expert panel process". Fearn-Banks, K. (2019, p.152 - 189) analyzed different types of crisis communication and response guidelines through case studies in "Crisis communications: A casebook approach", providing practical guidance and sharing experiences. Coombs, W. T. (2007) discussed planning, managing, and responding to crisis communication in the book "Ongoing crisis communication: Planning, managing, and responding". Ulmer, R. R., Sellnow, T. L., & Seeger, M. W. (2016) outlined effective crisis communication methods and the transformation of crises into opportunities in the book "Effective crisis communication: Moving from crisis to opportunity". Mitroff, I. I., & Anagnos, G. (2000) emphasized the importance of crisis prevention and proactive crisis management in "Managing crises before they happen: What every executive and manager needs to know about crisis management". Coombs, W. T., & Holladay, S. J. (2007, p.296 - 311) studied the impact of reputation on crisis management in "Unpacking the halo effect: Reputation and crisis management". Pearson, C. M., & Clair, J. A. (1998, p.59 - 76) discussed reframing crisis management and presented methods and perspectives for restructuring crisis management in the "Academy of Management Review". Benoit, W. L., & Czerwinski, A. M. (1997, p.556 - 579) addressed the situational and contextual

factors of crisis communication in organizations in "Organizations and their members: A contingency approach to crisis communication". Coombs, W. T. (2014) provided a comprehensive guide on ongoing crisis communication, including planning, managing, and responding, in "Ongoing crisis communication: Planning, managing, and responding (4th ed.)". Claes, E., & Hakanen, T. (2013, p.227 - 230) explored the role of social media in crisis communication, its advantages, disadvantages, and best practices in "Crisis communication and the social media: Advantages, disadvantages and best practices" published in the "Journal of Industrial and Intelligent Information".

Learning and reflection is at a relatively high level. This is because of the emphasis on education, training, and exercises in emergency management, as well as the promotion of campus safety knowledge. These include training and drills for emergency personnel, as well as various evacuation and escape exercises. Education, training, and exercises have always been given importance in emergency management in universities, and in recent years, efforts to strengthen and emphasize these aspects have increased. Although education, training, and exercises can no longer be considered weak links in university emergency management, the depth and breadth of safety education, the scope of emergency personnel training, and the level of participation and frequency of evacuation and escape drills should continue to deepen and strengthen in order to have a truly effective role after a crisis event occurs. In the United States, there is a strong emphasis on studying and learning from case studies in emergency management, drawing lessons from them (Fink, 1996; Jonathan, 2003). Case analysis and accumulation are clearly important in university emergency management work and can greatly enrich the experience of dealing with crises and enhance emergency management capabilities. It is important to pay attention not only to collecting and organizing case studies within the university but also to collecting relevant case studies from other universities and even from abroad. Li Hua (2018, pp. 120 - 125): It discusses the importance of the learning and summary stage of university crisis management. It emphasizes that through in-depth analysis of crisis events, lessons should be summarized and the crisis management system should be improved. It is proposed that the crisis awareness education for teachers and students should be strengthened to improve the ability to respond to crises. Zhang Min (2019, pp. 90 - 95): It studies the methods and approaches of the learning and summary of university crisis management. It is believed that a scientific

evaluation mechanism should be established to conduct a comprehensive evaluation of the effect of crisis management. At the same time, it is necessary to strengthen exchanges and cooperation with other universities to draw on beneficial experiences. Wang Qiang (2020, pp. 70 - 75): It analyzes the impact of the learning and summary stage of university crisis management on the development of the school. It is pointed out that through summarization, problems and deficiencies in management can be found, providing a reference for the long-term development of the school. It is suggested to strengthen the informatization construction of crisis management to improve work efficiency.

Part 2: the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing.

The researchers put forward guidelines to enhance the efficiency of managing crisis events in public universities in Nanjing. These guidelines encompass five aspects and consist of a total of 42 measures. Aiming to establish an efficient emergency response team, ten measures are identified to fully leverage the preventive function of crisis prevention as a shield. Focusing on conducting risk assessment and managing documentation, eight measures are delineated to fully utilize crisis preparedness as a toolkit. With the establishment of a spokesperson system, eight measures are proposed to fully employ crisis response as an emergency trigger. Emphasizing the provision of psychological counseling and support to the faculty, students, and staff, seven measures are determined to fully utilize crisis recovery as a healing agent. Finally, by means of fostering communication and sharing among sister institutions, nine measures are suggested to fully utilize learning and reflection as signposts.

With the goal of establishing an efficient emergency response team, we fully leverage the role of crisis prevention as a shield. In order to establish an efficient emergency response team and fully utilize its shield role in crisis prevention, a series of measures need to be taken. Firstly, a specialized crisis management team should be created, with clear goals and responsibilities, and the development of work plans and procedures. Training and drills should be conducted, and collaborations with other organizations should be strengthened. Secondly, an early warning system should be established to identify potential crises in a timely manner. Emergency response plans should be devised, and training for faculty, students, and

staff should be intensified to enhance crisis awareness and response capabilities. An effective communication mechanism should be established to ensure the smooth flow of information within the organization, and emergency resources should be stockpiled. Regular exercises and simulations should be conducted, and relationships with government, media, and society should be built. A system for managing crisis records should be established, and continuous learning and improvement in crisis prevention should be pursued. By implementing these comprehensive measures, an efficient emergency response team can be established, fully leveraging its shield role in crisis prevention, and making positive contributions to ensuring social stability, safety, and the well-being of the people. This aligns with the theories of Jonathan (2008, p. 48-52) and Steven (2006, p. 250-263), who emphasize the importance of building professional teams and the need to learn from the experiences of emergency management teams in American universities. Liu Li-wen and Wang Ze-ren (2011, p. 360-363) discussed the construction of the university crisis operation plan system in China in their paper "The research on the building of universities crisis operation plan system." It emphasizes the importance of accident management work and how it has become a topic of concern for the government and society. The paper identifies the weakness of accident management work in Chinese universities and discusses the problems that exist in current crisis action plan work. The paper proposes a university action plan system that includes overall planning, specific plans, personnel gathering place plans, and plans for major incidents on campus. Finally, the paper details three points to consider when establishing the university action plan system.

With the effective risk assessment and file management as the breakthrough point, fully utilized the power of the crisis preparedness toolkit. Establishing a sound risk assessment and emergency management system is crucial for ensuring the stable development of an organization. This includes collecting and analyzing risk information, establishing robust record management systems, developing effective risk response plans, monitoring and reporting on risks, conducting training and communication, and continuously improving emergency preparedness. Additionally, it is important to develop and update emergency response plans, establish emergency contacts and communication directories, conduct emergency drills and training, establish reliable information systems and

emergency communication networks, and stockpile and allocate emergency resources. Attention should also be paid to post-disaster recovery and psychological counseling, as well as collaborating with external organizations and societal forces to build a coordinated mechanism and share resources, ensuring timely support and assistance during emergencies. In summary, a comprehensive risk assessment and emergency management system should be implemented to effectively respond to emergencies and safeguard the stable development of an organization. This aligns with the theory proposed by Wu Chong (2012) in "Ability in Tackling Collegiate Emergency," where he constructed a comprehensive evaluation system for the emergency management capabilities of universities based on analyzing existing evaluation methods and developing a gray relational degree evaluation model for decision-making in public emergencies with incomplete information. This model was illustrated through numerical examples, highlighting its applicability. Zhang Jin-peng and Wang Qiang (2016, p. 103 - 108) discussed the guidelines and paths of higher education crisis management, including risk assessment, organizational structure development, training and drills, etc., in "Research on the Guidelines and Paths of Higher Education Emergency Management." Xu Qi (2014, p. 67 - 69) conducted research on the guidelines of emergency management in universities, including the application of information technology, the participation of faculty and staff, and emergency training, in "Research on the Guidelines of Emergency Management in Universities." Zhang Xi-hong (2013, p. 92 - 94) analyzed the current situation of emergency management in universities and proposed corresponding guidelines, such as establishing perfect emergency plans and strengthening emergency education, in "The Current Situation and Countermeasures of Emergency Management in Universities."

With the establishment of a spokesperson system as the core, fully utilize the emergency button of crisis response. An effective emergency management system should include the following aspects: establish an emergency command structure and chain of command, clarify responsibilities and command authority, to ensure the emergency response to crisis events and the coordination and cooperation among departments, institutions, and rescue forces. Timely collect and organize information related to the crisis event, and conduct accurate information analysis and evaluation, in order to make scientific and accurate

decisions. Send emergency notifications and alerts to faculty, staff, and students in a fast and accurate manner, ensuring they are promptly informed of the occurrence of the crisis event and the corresponding action instructions. Organize effective evacuation and rescue operations after the crisis event, ensuring the safety of faculty, staff, and students, and coordinating with relevant rescue and medical institutions to provide necessary first aid and medical assistance. Strengthen campus security measures, control and isolate sources of danger, establish necessary safety measures and protective measures, ensuring the personal safety and property security of faculty, staff, and students. Communicate with the media in a timely and effective manner, release accurate and transparent information, and avoid the spread of rumors and the amplification of panic, and establish effective communication channels with the public, responding to their concerns and providing necessary assistance. After the crisis event, conduct comprehensive post-event evaluation and analysis, summarize experiences and lessons learned, improve emergency response mechanisms and preventive measures, and simultaneously restore the normal order of the campus, help faculty, staff, and students overcome psychological pressure, and rebuild a stable and harmonious campus environment. At the same time, cooperation with relevant rescue organizations, government departments, and social forces is also essential. These collaborative relationships can provide additional support and resources, enhancing emergency management capabilities. This is related to the theory proposed by Guo Ji, Gao Xiaoping, Li Chengwei, Shen Ronghua, and Liu Yandan (2006, p.6-9) in their "Research Report on the Construction of Emergency Management Mechanism in Universities." The current focus of emergency management work in Chinese universities should be on strengthening mechanism innovation and implementing specific measures in the following aspects: innovating the mechanism of public opinion management in universities; establishing a flat information dissemination network; establishing a daily emergency management operation mechanism; effectively incorporating university emergency management into the government emergency management system; establishing a sound organizational system to achieve public governance of university emergency management; strengthening the construction of emergency psychological support systems; and strengthening the legal construction of university emergency management.

With the provision of psychological counseling and support for students and staff as the key, fully utilize the healing medicine of crisis recovery. An effective emergency management system should include providing psychological counseling and support, repairing damaged facilities and equipment, adjusting academic schedules, conducting publicity and image building, strengthening campus security, providing teacher training and support, and collaborating with the community. Psychological counseling and support helps staff and students cope with the psychological trauma and stress caused by crisis events. Establishing a mental health service mechanism can provide diverse support through professional counseling, educational campaigns, personalized plans, team building, etc. Repairing damaged facilities and equipment contributes to the rapid recovery and normal operation of the campus environment. Adjusting academic schedules ensures that teaching and learning activities can proceed smoothly and minimizes the impact of crisis events on the academic progress. Proactive publicity and image building showcase the school's determination and capabilities in crisis response and recovery, while strengthening communication and cooperation with the media to restore the school's reputation and image. Enhancing campus security management and prevention measures, conducting regular safety drills and training, and improving emergency response capabilities are essential. Providing necessary training and support for teachers to adapt to the new teaching environment after a crisis event is important. Cooperating with the community establishes partnerships and gains additional support and resources to jointly promote the recovery and development of the campus. These measures focus on meeting the practical needs of staff and students, promoting their physical and mental health and comprehensive development, and ensuring the normal operation and development of the campus.This is related to the views presented by Salman Elbedour, Futiem N. Alsubie, Shareefah N. Al'Uqdah (2021, p. 208-215) in their article "School Crisis Management Planning." The authors describe the components of a school crisis management plan based on research-based strategies and trauma-informed plans to address immediate situations and potential long-term outcomes. In this article, the authors highlight the important role of school mental health staff in developing and implementing trauma-informed school crisis management plans, which include prevention, communication, and different protocols for various crises.

Utilize exchanges and sharing among sister colleges as a means to fully leverage the role of learning and summarizing signposts. The learning process in crisis management is an important component of a college's crisis management capabilities. Learning plays a crucial role in the crisis management process (David, 2007; Borodzicz, 2002). However, in China's current crisis management practices, the learning process is often neglected or not given sufficient attention. The learning process in crisis management can be divided into two aspects: case-based learning and overall learning. Case-based learning involves analyzing and summarizing specific incidents to gain preventive and response experience. Overall learning involves collecting and organizing various types of emergency incident cases, establishing archival resources, and categorizing, supplementing, managing, learning, and sharing them. Currently, Chinese colleges tend to focus more on case-based learning, but weak aspects remain regarding the collection, archiving, and platform construction of various incident cases. Therefore, in college crisis management, sufficient attention and effort should be given to the learning process in order to continually enhance the crisis management capabilities of colleges. Li Hua (2018, p. 120 - 125) discusses the importance of the learning and summary stage of university crisis management. It emphasizes that through in-depth analysis of crisis events, lessons should be summarized and the crisis management system should be improved. It is proposed that the crisis awareness education for teachers and students should be strengthened to improve the ability to respond to crises. Zhang Min (2019, pp. 90 - 95) studies the methods and approaches of the learning and summary of university crisis management. It is believed that a scientific evaluation mechanism should be established to conduct a comprehensive evaluation of the effect of crisis management. At the same time, it is necessary to strengthen exchanges and cooperation with other universities to draw on beneficial experiences.

Part 3: The suitability and feasibility of the guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing.

Nine experts were invited to evaluate the guidelines for enhancing the efficiency of sudden crisis event management in public universities in Nanjing. These experts are from Southeast University, Jiangsu Union Technical Institute, Nanjing University, Jiangsu Open University, Nanjing Audit University, the Jiangsu Provincial

Government Office, the Jiangning District Public Security Bureau in Nanjing City, and the Jiangsu Provincial Department of Education. These experts come from both regular universities and vocational colleges, as well as relevant departments with supervisory responsibilities and operational intersections. The invited experts have certain experience and rich theoretical knowledge in the field of emergency response and crisis management. The suitability and feasibility of the guidelines for enhancing the efficiency of sudden crisis event management in public universities in Nanjing in five aspects are at the highest level, with values ranging from 4.00 to 5.00, indicating that the guidelines for enhancing the efficiency of sudden crisis event management in public universities in Nanjing are suitable and feasible.

Crisis Prevention. Well-established risk assessment system: Public colleges and universities in Nanjing can establish a comprehensive risk assessment system to systematically analyze possible crises and identify potential risk factors in advance. Regular safety education: Conduct regular safety education activities to enhance the safety awareness and crisis response capabilities of teachers and students, reducing the likelihood of crises. Information monitoring and early warning mechanism: Establish an effective information monitoring system to collect, analyze, and disseminate relevant information in a timely manner, so as to issue early warnings and take corresponding preventive measures before a crisis occurs. Campus facility maintenance and management: Strengthen the maintenance and management of campus infrastructure to ensure the safety of campus facilities and reduce the risk of crises caused by facility failures. Formulation of emergency plans: Develop detailed emergency plans, clarifying response measures and responsibility divisions in different crisis situations, to provide guidance for crisis prevention. Personnel training and drills: Regularly organize teachers and students for crisis prevention training and drills to improve their emergency response capabilities and practical operation skills. Cooperation with relevant departments: Establish good cooperative relationships with local government, public security, fire protection, and other relevant departments to achieve information sharing and resource complementarity, and jointly carry out crisis prevention work. Campus culture construction: Build a positive campus culture, cultivate the sense of responsibility and teamwork spirit of teachers and students, and enhance the school's cohesion and ability to respond to crises.

Crisis Preparedness. Sufficient material reserves: Colleges and universities should stockpile sufficient emergency supplies, such as protective equipment, rescue equipment, food, and water, to meet the needs in case of a crisis. Emergency team building: Build a professional emergency rescue team, including teachers, student volunteers, and relevant professionals, to ensure that they can be quickly deployed for rescue work in the event of a crisis. Communication equipment guarantee: Establish a complete communication system to ensure smooth communication between various departments within the campus and between the school and the outside world in a crisis situation. Establishment of an emergency command center: Set up a dedicated emergency command center to be responsible for coordinating and directing the crisis response work, improving decision-making efficiency and command capabilities. Regular simulation drills: Conduct regular simulation drills to test the feasibility and effectiveness of the emergency plan, and identify and improve problems in a timely manner. Data backup and recovery: Strengthen the backup and management of important school data to ensure the safety and recoverability of data in the event of a crisis. Resource allocation mechanism: Establish a scientific resource allocation mechanism to ensure the rational allocation of resources in the event of a crisis and improve resource utilization efficiency. Interaction with the community: Establish a good interactive relationship with the surrounding community to obtain community support and assistance in the event of a crisis and jointly respond to the crisis.

Crisis Response. Quick activation of the emergency plan: After a crisis occurs, the emergency plan can be quickly activated, and responses can be carried out in accordance with the predetermined processes and measures to control the development of the situation in the shortest possible time. Unified command and coordination: Establish a unified command system to coordinate various departments within the school and external rescue forces to form a joint force to jointly deal with the crisis. Timely information release: Release crisis information to teachers, students, and the society in a timely manner to avoid information chaos and the spread of rumors and maintain social stability. Personnel evacuation and resettlement: Quickly organize the evacuation of personnel to ensure the life safety of teachers and students, and do a good job in resettlement to provide necessary living guarantees. On-site rescue and disposal: Organize professional rescue forces for on-site rescue

and disposal to minimize casualties and property losses. Psychological counseling and support: Provide psychological counseling and support to teachers and students to help them relieve stress and resume normal study and life as soon as possible. Communication and cooperation with the media: Actively communicate and cooperate with the media, release accurate information in a timely manner, guide the media to report on crisis events objectively, and avoid the generation of negative public opinion. Drawing on international experience: Pay attention to advanced international crisis response experiences and practices, and draw on and apply them in light of the actual situation of the school to improve the level of crisis response.

Crisis Recovery. Infrastructure repair: Quickly organize the repair and reconstruction of damaged infrastructure to ensure the normal operation of the school. Restoration of teaching order: Resume the normal teaching order as soon as possible, adjust the teaching plan, and provide necessary counseling and support to students to help them make up for the academic delays caused by the crisis. Psychological rehabilitation of teachers and students: Carry out psychological rehabilitation work to provide psychological counseling and treatment services to teachers and students to help them overcome the psychological trauma caused by the crisis. Reconstruction of social relations: Strengthen communication and contact with all sectors of society to rebuild a good social image and social relations. Experience summary and reflection: Summarize and reflect on the crisis event, analyze the causes, learn lessons, and provide a reference for future crisis management. Recovery assessment and monitoring: Establish a recovery assessment mechanism to monitor and evaluate the progress and effectiveness of the recovery work and adjust the recovery strategy in a timely manner. Funding guarantee: Ensure that there are sufficient funds for crisis recovery work, including expenses for infrastructure repair, personnel training, psychological counseling, etc. Sustainable development planning: Combine the experience and lessons of the crisis event to formulate the school's sustainable development plan to improve the school's risk resistance and comprehensive competitiveness.

Learning and Reflection. Case analysis and research: Analyze and study cases of sudden crisis events in domestic and foreign colleges and universities, summarize successful experiences and failure lessons, and provide a reference for public colleges and universities in Nanjing. Internal experience exchange: Organize

experience exchanges among various departments within the school to share experiences and practices in crisis management and jointly improve the level of crisis management. Expert consultation and guidance: Invite experts and scholars in the field of crisis management to consult and guide the school's crisis management work and provide professional suggestions and opinions. Student participation and feedback: Encourage students to participate in crisis management work, listen to their opinions and suggestions, and continuously improve crisis management measures. Continuous training and education: Regularly carry out training and educational activities on crisis management to enable teachers and students to continuously update their knowledge and skills and adapt to the changing crisis situation. Cultural reflection and construction: Through reflection on crisis events, promote the construction and development of campus culture, and cultivate the crisis awareness and sense of responsibility of teachers and students. System improvement and innovation: Based on the practical experience of crisis management, improve and innovate the relevant systems of the school to improve the scientificity and effectiveness of the systems. Expansion of international perspective: Pay attention to the latest trends and developments in international crisis management, broaden the horizons, draw on international advanced concepts and methods, and improve the school's crisis management level.

In conclusion, from the five aspects of Crisis Prevention, Crisis Preparedness, Crisis Response, Crisis Recovery, and Learning and Reflection, the evaluation of the guidelines for improving the management efficiency of sudden crisis events in public colleges and universities in Nanjing is highly feasible and adaptable. By improving the work in all aspects, colleges and universities can better respond to sudden crisis events and ensure the life safety of teachers and students and the normal operation of the school.

Recommendations

Implications

The research results showed that the recommendations about guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing are as follows:

Crisis Prevention. Researchers propose that managers should establish a professional crisis management team accountable for formulating crisis response strategies, coordinating resources, and communicating information to the public. Specific measures encompass clarifying goals and responsibilities, selecting team members, establishing an organizational structure, developing work plans and procedures, conducting training and drills, carrying out regular evaluations and reviews, establishing an information sharing mechanism, strengthening collaboration with other organizations, improving the system and management, enhancing publicity and education, and continuously improving and innovating.

Crisis Preparedness. Researchers suggest that managers should exert efforts in multiple aspects. Schools should conduct risk assessment and file management, including collecting and analyzing information and enhancing files. Emergency plans should be formulated and updated to delineate response measures and responsibilities, and emergency contacts should be determined. Emergency drills and training should be organized to enhance the emergency response capabilities of teachers, students, and staff. A sound information system and emergency communication network should be established, along with emergency material reserves and resource allocation plans to address crises.

Crisis Response. Managers are advised to set up an emergency command structure, define responsibilities and authorities, and coordinate all involved. Information must be gathered and analyzed quickly for scientific decision-making. Teachers, students, and staff should be informed and alerted via various methods. Evacuation and rescue efforts should be arranged, with first aid and medical support provided, and coordination with relevant rescue and medical entities enhanced. Safety protection measures should be improved to control and isolate the hazard source. Maintaining effective communication with the media to disseminate accurate information is crucial. Additionally, an efficient communication channel with the public should be created to address their concerns and offer necessary assistance.

Crisis Recovery. It requires administrators to take multiple actions. Measures should be implemented to ensure the welfare and development of teachers, students, and staff. Establish a mental health service mechanism for counseling. Repair campus facilities to resume normal operations. Adjust academic progress based on the crisis impact. Publicize the school's response and recovery to enhance media communication and restore reputation. Strengthen campus security management to raise safety awareness. Provide training and support to teachers to adapt to the new teaching environment. Build partnerships with external communities to secure more support and resources for campus recovery and development.

Learning and Reflection. They are crucial for administrators. They should: Understand the needs of sister universities and conduct activities for experience exchange and crisis management improvement to ensure student safety and campus stability. Systematically organize the crisis event, collect and analyze data, and prepare a detailed summary report. Hold a meeting to discuss and implement improvement measures and action plans. Provide feedback on the report and measures to relevant parties and the public, and address their concerns. This can enhance crisis management capabilities, ensure safety, and promote campus stability.

Future Researches

1. There are limitations in the research scope. This study solely focuses on public universities in Nanjing, which to some extent restricts our comprehension of the management of sudden crisis events in universities. Hence, it is necessary to broaden the research scope to encompass private universities, other regions, and even different countries to acquire a more comprehensive viewpoint.

2. The sample coverage is insufficiently extensive. The overall coverage of the study is not comprehensive. It is hoped that in the subsequent research, large-scale investigations can be conducted to enhance the evaluation indicators and weight system.

3. There are limitations in interdisciplinary research. This study entails multiple disciplinary fields such as management, education, communication, and political science. In future research, by forming a research team and integrating their respective advantages, the modes and models of crisis communication can be

explored more profoundly, thereby obtaining more complete guidelines and optimization strategies.

4. The participation of relevant stakeholders is limited. This study would be significantly benefited if it could actively engage the participation of various stakeholders such as university administrators, teachers, students, and external experts. Their insights and experiences can contribute to a more comprehensive understanding of crisis management in higher education and assist in formulating practical and effective strategies.

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Appendices

Appendix A

List of Specialists and Letters of Specialists Invitation for IOC Verification

Specialists for IOC Verification

No	Name	Personal Introduction
1	Wang Ninghai	Degree: Doctor Work unit: Southeast University Research direction: Law Graduated from: Southeast University
2	Yu Jinhai	Degree: Doctor Work unit: Nanjing University Research direction: Higher Education Management Graduated from: Nanjing University
3	Li Dong	Degree: Doctor Work unit: Jiangsu Union Technical Institute Research direction: Education Management Graduated from: China University of Petroleum (East China)
4	Xu Anning	Degree: Master Work unit: Jiangsu Open University Research direction: Education Management Graduated from: Nanjing University
5	Sun Mingjun	Degree: Master Work unit: Nanjing Normal University Research direction: Education Management Graduated from: Nanjing Normal University

Appendix B

Official Letter

Ref.No. MHESI 0643.14/863

Bansomdejchaopraya Rajabhat University
1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

22 January 2024

RE: Invitation to validate research instrument

Dear Associate professor Wang Ninghai,Southeast University

Mrs.Wu Jie is a graduate student in Doctor of Philosophy Program in Educational Administration of Bansomdejchaopraya Rajabhat University. She is undertaking research entitle "Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing"

The thesis adversity committee has considered that you are an expert in this topic. Your recommendations would be useful for further improvement of this research instrument.

With your expertise, we would like to ask your permission to validate the attached research instrument. Would like to avail ourselves of this opportunity to express our sincere thanks and appreciation for your help.

Sincerely,

(Assistant Professor Dr.Kanakorn Sawangcharoen)
Dean of Graduate School

Bansomdejchaopraya Rajabhat University
Tel.+662-473-7000
www.bsru.ac.th
E-mail: grad@bsru.ac.th

Ref.No. MHESI 0643.14/866

Bansomdejchaopraya Rajabhat University
1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

22 January 2024

RE: Invitation to validate research instrument

Dear Associate professor Xu Anning,Jiangsu Open University

Mrs.Wu Jie is a graduate student in Doctor of Philosophy Program in Educational Administration of Bansomdejchaopraya Rajabhat University. She is undertaking research entitle "Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing"

The thesis adversity committee has considered that you are an expert in this topic. Your recommendations would be useful for further improvement of this research instrument.

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Sincerely,

(Assistant Professor Dr.Kanakorn Sawangcharoen)
Dean of Graduate School

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Ref.No. MHESI 0643.14/864

Bansomdejchaopraya Rajabhat University
1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

22 January 2024

RE: Invitation to validate research instrument

Dear Professor Dr. Yu Jinhai,Nanjing University

Mrs.Wu Jie is a graduate student in Doctor of Philosophy Program in Educational Administration of Bansomdejchaopraya Rajabhat University. She is undertaking research entitle "Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing"

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(Assistant Professor Dr.Kanakorn Sawangcharoen)
Dean of Graduate School

Bansomdejchaopraya Rajabhat University
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1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

22 January 2024

RE: Invitation to validate research instrument

Dear Associate professor Dr. Li Dong, Jiangsu Union Technical Institute

Mrs.Wu Jie is a graduate student in Doctor of Philosophy Program in Educational Administration of Bansomdejchaopraya Rajabhat University. She is undertaking research entitle "Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing"

The thesis adversity committee has considered that you are an expert in this topic. Your recommendations would be useful for further improvement of this research instrument.

With your expertise, we would like to ask your permission to validate the attached research instrument. Would like to avail ourselves of this opportunity to express our sincere thanks and appreciation for your help.

Sincerely,

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22 January 2024

RE: Invitation to validate research instrument

Dear Associate professor Sun Mingjun,Nanjing Normal University

Mrs.Wu Jie is a graduate student in Doctor of Philosophy Program in Educational Administration of Bansomdejchaopraya Rajabhat University. She is undertaking research entitle "Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing"

The thesis adversity committee has considered that you are an expert in this topic. Your recommendations would be useful for further improvement of this research instrument.

With your expertise, we would like to ask your permission to validate the attached research instrument. Would like to avail ourselves of this opportunity to express our sincere thanks and appreciation for your help.

Sincerely,

(Assistant Professor Dr.Kanakorn Sawangcharoen)
Dean of Graduate School

Bansomdejchaopraya Rajabhat University
Tel.+662-473-7000
www.bsru.ac.th
E-mail: grad@bsru.ac.th

Ref.No. MHESI 0643.14/890

Bansomdejchaopraya Rajabhat University
1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

22 January 2024

RE: Request for Data Collection

Dear Nanjing Vocational College of Information Technology

Mrs.Wu Jie is a graduate student in Doctor of Philosophy Program in Educational Administration of Bansomdejchaopraya Rajabhat University. She is undertaking research entitle "Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing"

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Ref.No. MHESI 0643.14/878

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1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

22 January 2024

RE: Request for Data Collection

Dear Jiangsu Open University

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1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

22 January 2024

RE: Request for Data Collection

Dear Nanjing XiaoZhuang University

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22 January 2024

RE: Request for Data Collection

Dear Southeast University

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Ref.No. MHESI 0643.14/891

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1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

22 January 2024

RE: Request for Data Collection

Dear Jiangsu Union Technical Institute

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Ref.No. MHESI 0643.14/874

Bansomdejchaopraya Rajabhat University
1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

22 January 2024

RE: Invitation to evaluate the guideline

Dear Sir or Madam, Jiangning District Public Security Bureau

Mrs.Wu Jie is a graduate student in Doctor of Philosophy Program in Educational Administration of Bansomdejchaopraya Rajabhat University. She is undertaking research entitle "Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing"

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Ref.No. MHESI 0643.14/873

Bansomdejchaopraya Rajabhat University
1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

22 January 2024

RE: Invitation to evaluate the guideline

Dear Sir or Madam, Jiangsu Provincial Government Office

Mrs.Wu Jie is a graduate student in Doctor of Philosophy Program in Educational Administration of Bansomdejchaopraya Rajabhat University. She is undertaking research entitle "Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing"

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Ref.No. MHESI 0643.14/872

Bansomdejchaopraya Rajabhat University
1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

22 January 2024

RE: Invitation to evaluate the guideline

Dear Sir or Madam, Nanjing Audit University

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22 January 2024

RE: Invitation to evaluate the guideline

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Thonburi Bangkok 10600

22 January 2024

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22 January 2024

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1061 Itsaraparb Hirunrujee
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22 January 2024

RE: Invitation to evaluate the guideline

Dear Sir or Madam, Southeast University

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Bansomdejchaopraya Rajabhat University
1061 Itsaraparb Hirunrujee
Thonburi Bangkok 10600

22 January 2024

RE: Invitation to evaluate the guideline

Dear Sir or Madam, Jiangsu Provincial Department of Education

Mrs.Wu Jie is a graduate student in Doctor of Philosophy Program in Educational Administration of Bansomdejchaopraya Rajabhat University. She is undertaking research entitle "Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing"

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Appendix C

Research Instrument

Questionnaire
Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing

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Explanation

1. This questionnaire is about guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing. The objectives of this research were to study the current situation of the efficiencyof sudden crisis event management in public universities in Nanjing. To provide the guidelines for improving the efficiencyof sudden crisis event management in public universities in Nanjing. To evaluate the suitability and feasibility of the guidelines for improving the efficiencyof sudden crisis event management in public universities in Nanjing.

2. The questionnaire about guidelines for improving the efficiency of sudden crisis event management in public universities in Nanjing, which provided into two parts. Part one is personal information of respondents and part two is survey about the current situation of the efficiency of sudden crisis event management in public universities in Nanjing, total 54 questions.

3. Please tick√ in the columns that represent your opinion about the efficiency of sudden crisis event management in public universities in Nanjing.

Thank you

Mrs. Wu Jie

A doctoral student in Educational administration program

Bansomdejchaopraya Rajabhat University

Part 1: Personal Information of respondents

1. Your gender

☐ Male ☐ Female

2. Type of your universities

☐ ordinary universities ☐ vocational universitie

3. Your education background

☐ Bachelor's degree ☐ Master's degree ☐ Doctor's degree

4. Your professional title

☐ Junior Title ☐ Intermediate Title ☐ Associate Senior Title

☐ Full Senior Title ☐ Other

5. Your years of experience in universities

☐ Less than 1 year ☐ 1-5 years ☐ 6-10 years ☐ 11-20 years ☐ Over 20 years

6. Your years of experience in in crisis management

☐ Less than 1 year ☐ 1-5 years ☐ 6-10 years ☐ 11-20 years ☐ Over 20 years

7. Your experience in participating in the formulation of crisis response plans for higher education institutions

☐ Yes, actively involved multiple times ☐ Yes, occasionally involved

☐ No, but familiar with relevant guidelines

☐ No, not familiar with relevant guidelines

Part 2: Survey about the current situation of the efficiency of sudden crisis event management in public universities in Nanjing

5 express the level of the efficiency of sudden crisis event management in public universities in Nanjing were at strongly high level

4 express the level of the efficiency of sudden crisis event management in public universities in Nanjing were at high level

3 express the level ofthe efficiency of sudden crisis event management in public universities in Nanjing were at medium level

2 express the level of the efficiency of sudden crisis event management in public universities in Nanjing were at low level

1 express the level of the efficiency of sudden crisis event management in public universities in Nanjing were at strongly low level

Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing

NO	The Current situation of the efficiency of sudden crisis event management in public universities in Nanjing	Level				
		5	4	3	2	1
Crisis Prevention						
1	administrator establishing a security personnel team that combines full-time and part-time employees can effectively prevent sudden crisis events.					
2	administrator establishing an experienced and adequately staffed expert group capable of handling different types of emergencies plays a crucial role in preventing sudden crises.					
3	administrator strengthening the training and assessment of security personnel plays an important role in the crisis prevention stage.					
4	administrator increasing investment in security facilities and equipment plays an important role in the crisis prevention stage.					
5	administrator paying attention to emergency supplies and reserves plays an important role in the crisis prevention stage.					
6	The participation of all staff members plays an important role in preventing the occurrence of sudden crisis events.					
7	administrator establishing a three-tier emergency team at the school-department-class level plays an important role in preventing the occurrence of sudden crisis events.					
8	The emphasis of school leadership helps in formulating emergency plans to address different crisis scenarios.					
9	administrator increasing investment in safety emergency funds plays an important role in					

NO	The Current situation of the efficiency of sudden crisis event management in public universities in Nanjing	Level				
		5	4	3	2	1
	the crisis prevention stage.					
10	administrator conducting objective and reasonable evaluations of crises helps in formulating emergency plans to address different crisis scenarios.					
Crisis Preparedness						
1	administrator offering safety knowledge courses and lectures, conducting security awareness campaigns, can effectively prepare for crisis management.					
2	administrator conducting risk information assessment and archive management can effectively prepare for crisis management.					
3	administrator increasing the proportion of emergency drills and exercises conducted by the entire school's faculty and students can effectively prepare for crisis management.					
4	administrator ensuring that all faculty and students within the school are aware of emergency hotline numbers for various types of emergencies and social reporting channels can effectively prepare for crisis management.					
5	administrator increasing the proportion of faculty and students receiving emergency training can effectively prepare for crisis management.					
6	administrator institutionalizing the duty roster system, strengthening campus patrols and security management to ensure safety order and environment within the campus, can effectively prepare for crisis management.					

NO	The Current situation of the efficiency of sudden crisis event management in public universities in Nanjing	Level				
		5	4	3	2	1
7	administrator establishing comprehensive emergency plans, clarifying emergency response measures and responsibilities for various types of unforeseen crises, can be helpful in dealing with sudden crisis events in universities.					
8	administrator establishing an emergency contact directory that includes key internal personnel and external emergency organizations facilitates timely communication and coordination in the event of emergencies.					
9	administrator establishing an information system and emergency communication network including SMS notification systems, online platforms, emergency broadcasts, etc., facilitates timely delivery and receipt of important information during emergencies.					
10	administrator promoting connections and cooperation between universities and relevant emergency organizations, medical institutions, security agencies, etc., to form a collaborative mechanism and resource sharing, which is beneficial in obtaining more support and assistance.					
Crisis Response						
1	administrator establishing an emergency command structure and chain of command, clarifying responsibilities and command authority, can effectively respond to sudden crisis events.					
2	administrator organizing timely and effective emergency response and coordinating departments, organizations, and rescue forces					

NO	The Current situation of the efficiency of sudden crisis event management in public universities in Nanjing	Level				
		5	4	3	2	1
	can effectively respond to sudden crisis events.					
3	administrator establishing effective communication with the public, addressing their concerns and providing necessary assistance, is one of the key ways to respond to a crisis.					
4	administrator accurately collecting and analyzing information can ensure the scientific and accurate nature of decision-making.					
5	administrator establishing an emergency notification and alarm mechanism can ensure that individuals are promptly informed of the occurrence of a crisis event and the corresponding action instructions.					
6	administrator strengthening campus security protection work, quickly evacuating, controlling, and isolating hazards, is one of the important tasks for emergency control.					
7	administrator coordinating and cooperating with relevant rescue and medical institutions is one of the key ways for emergency response.					
8	administrator establishing a spokesperson system for news releases is an important measure for managing public opinion crises.					
9	administrator establishing necessary safety and protection measures is an important task for emergency control.					
10	administrator promptly collecting and organizing information related to the crisis event and conducting accurate information analysis and assessment can effectively respond to sudden crisis events.					

NO	The Current situation of the efficiency of sudden crisis event management in public universities in Nanjing	Level				
		5	4	3	2	1
11	administrator organizing effective evacuation and rescue operations after a crisis event can ensure the safety of students and staff.					
12	administrator should engage in timely and effective communication with the media, releasing accurate and transparent information.					
13	The supply of emergency and first aid facilities and supplies is the material basis for crisis management.					
14	administrator' communication and collaboration with relevant personnel both inside and outside the school is one of the key aspects of emergency coordination.					
Crisis Recovery						
1	administrator should conduct comprehensive post-event evaluation and analysis, summarize lessons learned, and improve emergency response mechanisms and preventive measures.					
2	administrator should provide necessary psychological counseling and support to teachers, students, and staff, to help them alleviate the psychological trauma and stress caused by the crisis events.					
3	administrator should repair and rebuild damaged campus facilities and equipment, in order to quickly restore normal operations of the campus environment.					
4	administrator should punish responsible individuals and reward relevant personnel.					
5	administrator should make necessary adjustments and arrangements to the school's teaching schedule, based on the impact of the					

NO	The Current situation of the efficiency of sudden crisis event management in public universities in Nanjing	Level				
		5	4	3	2	1
	crisis event, in order to minimize the impact on the teaching process.					
6	administrator should strengthen communication and cooperation with the media, convey positive and constructive information, and contribute to the reputation recovery of the school.					
7	administrator should actively publicize the school's crisis response efforts, demonstrating the determination and capabilities of the school, and promote the restoration of the school's image.					
8	administrator should enhance campus security management and preventive measures, repair and reinforce security facilities, and improve the safety awareness and prevention capabilities of teachers, students, and staff, to recover from the impact of the crisis event.					
9	administrator should provide necessary training and support, and communicate with teachers and students, to help them adapt to the new environment after the crisis event.					
10	administrator should collaborate with government, social organizations, and businesses, to facilitate the recovery and development of the campus after the crisis event.					
Learning and Reflection						
1	administrator should summarize experiences and lessons learned, identify issues and shortcomings in the events, and provide directions for improvement and prevention in					

NO	The Current situation of the efficiency of sudden crisis event management in public universities in Nanjing	Level				
		5	4	3	2	1
	the future.					
2	administrator should encourage sharing experiences among sister institutions, which can promote effective management of emergency crisis events across the entire higher education sector and society.					
3	administrator should collect and document various cases related to the campus, which is beneficial for summarizing experiences and providing references for future work.					
4	administrator should evaluate the school's emergency response effectiveness in crisis events, including leadership decision-making, command organization, information dissemination, evacuation, and rescue efforts. Identify successful experiences and areas for improvement in emergency response, providing reference and guidance for future emergency work.					
5	administrator should improve measures and establish corresponding supervision mechanisms to ensure the effective implementation of improvement measures.					
6	administrator should provide summary reports and updates on the implementation of improvement measures to relevant parties and the public, and promptly respond to concerns and questions from all parties. This contributes to improving and improving the level of management and prevention of emergency crisis events in higher education institutions.					
7	administrator should conduct comprehensive reviews and in-depth analysis of the occurred					

NO	The Current situation of the efficiency of sudden crisis event management in public universities in Nanjing	Level				
		5	4	3	2	1
	emergency crisis events, including the causes, processes, response measures, and effectiveness evaluation.					
8	administrator should evaluate the school's communication and information management during crisis events, including the effectiveness of information gathering, processing, and dissemination, as well as communication with teachers, students, staff, and the public. Identify strengths and improvement areas in communication and information management, improving accuracy, timeliness, and transparency of information.					
9	administrator should compile the experiences and lessons learned into a knowledge base for future reference and training. This facilitates sharing experiences and improving the crisis management awareness and capabilities of all employees.					
10	administrator should organize training and simulated exercises based on the lessons learned, improving the emergency response and coordination abilities of faculty and staff. Through practical training, strengthen teamwork and crisis response capabilities.					

Structured Interview
Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing

This Structured Interview is divided into two parts:

Part 1: Personal Information

Part 2: The Current Situation of the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing

---

Part 1: Personal Information

Interviewer..... Interview Date..... Interview Time

Interviewee..... Gender..... Age..... years old

Education background..... Position

Academic title..... Work experience

Work place

Part 2: The Current Situation of the efficiency of sudden crisis event management in public universities in Nanjing

Instruction: To enhance the efficiency of managing emergency crisis events in public universities in Nanjing, researchers have proposed the following five questions:

1. How to establish an emergency response team? Additionally, what suggestions do you have for crisis prevention?
2. How to conduct risk information assessment and file management? Additionally, what suggestions do you have for crisis preparedness?
3. How to develop a spokesperson system for handling media communications during crises? Additionally, what suggestions do you have for crisis response?
4. How to provide psychological counseling and support for faculty, students, and staff? Additionally, what suggestions do you have for crisis recovery?
5. How to facilitate communication and sharing among sister universities? Additionally, what suggestions do you have for the learning and reflection stage after unexpected crisis events occur?

Interview record

1. How to establish an emergency response team? Additionally, what suggestions do you have for crisis prevention?

Interviewee 1: To establish an emergency response team, it is necessary to create a clear organizational structure, conduct comprehensive resource assessment within the school, provide relevant training and drills, and ensure that members from different departments are familiar with their roles and responsibilities, thus improving the team's coordination and response capabilities. As for crisis prevention, I suggest establishing a sound safety management system, strengthening security education, and investing in campus security equipment.

Interviewee 2: Establishing an emergency response team requires considering various aspects such as team responsibilities, personnel, work plans, training and drills, evaluation and summarization, information sharing, collaboration, institutional management, and propaganda and education. It is important to continuously improve the team's response capabilities. In terms of crisis prevention, it is necessary to establish a comprehensive early warning system and emergency response plans, enhance crisis awareness and response capabilities among teachers, students, and staff, establish information communication mechanisms and reserve emergency resources, and build good relationships with the government, media, and society. We should also strengthen the construction of crisis management teams and file management systems and continuously learn and improve methods and techniques for crisis prevention.

Interviewee 3: To establish an emergency response team, firstly, establish an emergency office dedicated to handling sudden events in the school, clearly defining the roles and responsibilities of team members. Secondly, improve the emergency response mechanism by conducting rapid risk assessments of sudden events. Thirdly, strengthen training for team members and conduct performance assessments. In terms of crisis prevention, it is important to enhance crisis assessment and risk management, strengthen the construction of a safe environment, and regularly conduct various types of training.

Interviewee 4: To establish an emergency response team, it is necessary to have a well-structured team with clear responsibilities. Generally, the school leadership is responsible, with specific leaders in charge of emergency or security matters, and team members include staff from various departments. In terms of crisis prevention, it is important to detect and address issues as early as possible. To

achieve this, every member of the university community must have a crisis awareness.

Interviewee 5: Establishing an emergency response team involves steps such as setting clear objectives and responsibilities, determining personnel and organizational structure, developing work plans and processes, conducting training and drills, and conducting regular evaluations and summaries. For crisis prevention, suggestions include establishing an early warning system, developing emergency response plans, improving crisis awareness, establishing information communication mechanisms, reserving emergency resources, conducting exercises and simulations, building good relationships with the government, media, and society, and establishing a crisis file management system.

Interviewee 6: The steps to establish an emergency response team include determining team members, defining team organization structure, clarifying team responsibilities and authority, providing training and drills, and ensuring sufficient resources and equipment for the team. For crisis prevention, suggestions include establishing a risk assessment system, conducting regular safety inspections and drills, improving safety training and awareness, and establishing emergency situation alarm and feedback mechanisms.

Interviewee 7: Firstly, we need to ensure that team members have relevant professional knowledge and skills, such as medical, legal, or psychological counseling expertise. Secondly, regular training and drills are necessary to ensure that team members can act quickly and accurately in a real crisis situation. Additionally, we need to ensure that the team has sufficient resources and support for their actions. I believe that crisis prevention is an ongoing process that requires us to approach it from multiple angles. Regular risk assessments are needed to understand potential crisis situations and their potential impact. Effective preventive measures such as strengthening safety education and improving safety awareness among teachers and students, developing comprehensive emergency plans to ensure rapid and effective responses during crises. Finally, regular evaluation and updates of preventive measures are necessary to ensure their ongoing effectiveness.

Interviewee 8: First, establish a well-structured team organization. Clarify the main tasks and responsibilities of the team and select members with relevant skills and experience. Conduct training and drills on crisis management, emergency response, communication skills, etc. Establishing an emergency response team requires comprehensive consideration of team members' abilities and resources, as well as close cooperation with other relevant departments.

Interviewee 9: This team should include personnel from multiple departments and functions, such as campus security, healthcare, and counseling. They should receive appropriate training to understand different types of crisis event handling methods and have practical experience to react and take action quickly in critical moments. When establishing the team, it is particularly important to clarify the team's organizational structure and division of responsibilities. Each team member should be clear about their roles and responsibilities. In terms of crisis prevention, firstly, establish sound safety management systems and regulations, strengthen campus security management, and prevent the occurrence of various safety accidents. Secondly, strengthen student mental health education, provide psychological counseling services, help students solve emotional and psychological problems, and reduce potential crises. In addition, strengthen cooperation with relevant departments and social resources, establish emergency response mechanisms, and ensure timely mobilization of external resources for support in the event of an emergency.

Interviewee 10: Generally, the team for handling emergency crisis events consists of the main leaders of the school, the heads of the propaganda department and the security department, and the relevant leaders of the school administration or the party office. It mainly depends on the nature of the crisis event. In terms of crisis prevention, a judgment meeting will generally be held for different types of crisis events to carry out prevention work in advance and remind functional departments and related colleges to strengthen prevention.

Interviewee 11: Methods for establishing emergency response teams include: 1) Providing necessary training for team members, including knowledge and skills in crisis management and emergency response, and conducting regular practical drills. 2) Clearly defining the responsibilities and division of labor among team members to ensure quick and coordinated actions in the event of a crisis. Suggestions for crisis prevention include: 1) Ensuring that buildings, equipment, fire protection systems, etc. on campus are in good condition to minimize potential safety hazards. 2) Developing detailed crisis management plans that provide guidance and measures for prevention, response, and recovery stages.

Interviewee 12: When establishing an emergency response team, it is advisable to recruit personnel with relevant experience and skills, including emergency management experts, security experts, medical professionals, etc. Establish cooperation mechanisms with relevant departments and institutions, such as police, fire departments, medical institutions, etc., to jointly respond to emergencies.

Suggestions for crisis prevention include: 1) Assessing potential dangers and risks on campus and developing corresponding preventive measures. 2) Providing safety education and training for all staff, improving their safety awareness and response capabilities.

Based on the suggestions of 12 interviewees, the following measures are proposed to establish an efficient emergency response team and fully utilize the preventive shield: 1) Establish a crisis management team. 2) Establish an early warning system. 3) Develop emergency response plans. 4) Enhance crisis awareness. 5) Establish an information communication mechanism. 6) Stockpile emergency resources. 7) Conduct drills and simulations. 8) Develop good relationships with the government, media, and society. 9) Establish a crisis archives management system. 10) Continuously learn and improve.

2. How to effectively assess and manage risk information and archives? Additionally, what suggestions do you have for crisis preparedness?

Interviewee 1: Firstly, establish an information security system to enhance the physical security of archives. Secondly, conduct information security assessments and analyze the composition of archives.

Interviewee 2: Risk information assessment and archive management require active participation and collaboration from various departments within the organization to ensure timely identification, assessment, and control of various risks, thus ensuring the organization's stable development. In terms of crisis preparedness, universities need to be well-prepared and plan ahead by developing contingency plans, establishing teams, monitoring information, implementing warning systems, developing response strategies, recovery mechanisms, and conducting simulation exercises to enhance their crisis response capabilities.

Interviewee 3: To effectively assess risk information and manage archives, firstly, identify security risks in the archive system, assess the probability and impact of those risks, establish risk control measures, and regularly update and improve the action plan. In terms of crisis preparedness, it is important to understand various types of crises and potential risks, develop corresponding crisis response plans, and establish a crisis rescue system.

Interviewee 4: Risk information assessment and archive management require categorization and specialized research by designated personnel, with different response plans tailored for different types of crises. In terms of crisis preparedness,

regular crisis management seminars can be held to collectively assess potential crises for a particular stage.

Interviewee 5: Risk information assessment and archive management can be done through: 1) collecting and analyzing risk information; 2) establishing and improving archives; 3) developing risk response plans. Suggestions for crisis preparedness include: 1) developing crisis contingency plans, including plans, operational procedures, and technical support systems for crisis response; 2) establishing a crisis management team composed of professionals with extensive crisis management experience and skills; 3) establishing an information monitoring system to timely acquire crisis-related information; 4) developing a crisis warning system to alert and predict potential crises through data analysis and risk assessments; 5) developing corresponding response strategies based on different types of crises.

Interviewee 6: The key to risk information assessment and archive management lies in establishing a comprehensive risk assessment system, including collecting and analyzing risk information, assessing the likelihood and impact of risks, and developing corresponding risk response measures. In terms of crisis preparedness, it is advisable to establish crisis event archives, regularly update and maintain archive information, develop crisis warning mechanisms, and establish emergency communication and contact methods.

Interviewee 7: For risk information assessment, I believe it is necessary to establish a comprehensive risk assessment system, including a detailed assessment of campus environment, facilities, personnel qualifications, etc. In addition, regular updates and adjustments to risk information are necessary to adapt to the constantly changing environment. For archive management, I recommend establishing a sound archive management system, including archiving, storage, retrieval, etc., to ensure that relevant information and materials can be quickly accessed in the event of a crisis. I believe crisis preparedness primarily involves two aspects: developing detailed emergency plans, including response processes, responsible parties, and resource allocation, and conducting regular emergency drills to test the feasibility of the plans and enhance the emergency response capabilities of faculty, students, and staff. Moreover, strengthening crisis management training and education is necessary to raise the crisis awareness of the entire school community.

Interviewee 8: Firstly, establish a systematic risk information collection mechanism, including regular checks and evaluations of existing risk information sources such as internal reports, external reports, industry data, etc. Then, assess the collected risk information, including determining the likelihood and potential impact

of risk events, and develop corresponding risk response measures. Based on this, establish a risk archive system to record and archive collected risk information, assessment results, response measures, etc., ensuring traceability and proper organization of risk information, and conducting regular updates.

Interviewee 9: In the risk assessment of public universities, it is recommended to establish a comprehensive risk assessment mechanism, including the comprehensive collection and analysis of potential risks both inside and outside the campus, such as natural disasters and safety accidents. During the assessment process, each risk should be evaluated in terms of probability and impact, in order to determine priority and corresponding response measures. In terms of archive management, archives should include detailed information such as the time, location, casualties, and emergency response measures of incidents, for subsequent analysis and lessons learned. For crisis preparedness, first, establish a sound crisis warning mechanism. The university should establish close cooperation with relevant departments, timely obtain social risk information, and release warning information through multiple channels. This enables early identification of potential risks and provides sufficient time for emergency preparedness. Second, enhance crisis drills and training. Finally, establish a sound crisis management organization system. The university should establish a dedicated crisis management department or committee to organize, lead, and coordinate crisis management work. At the same time, clarify responsibilities and establish a close information communication and collaboration mechanism, ensuring timely response and effective handling of crisis events.

Interviewee 10: Risk information assessment and archive management in our university typically involve discussing the collected information in relevant department meetings, developing response strategies based on the situation, and preserving and managing meeting minutes by the office of the university president. In terms of crisis preparedness, I suggest each department develop crisis response plans, including action steps and personnel arrangements. Furthermore, it is important to stockpile resources in advance.

Interviewee 11: Suggestions for risk information assessment and archive management include establishing an information sharing platform to timely share relevant information and resources for more effective response to emergencies. In terms of crisis preparedness, it is advisable to establish an emergency communication system to ensure timely and effective communication and command during emergencies.

Interviewee 12: To ensure good risk information assessment and archive management, it is recommended to pay attention to the inspection cycle and frequency of safety checks, control high-risk events, summarize, record and evaluate security, and manage high-risk events through archives. Suggestions for crisis preparedness include: 1) developing detailed emergency plans for different types of crisis events, defining responsibilities and action steps for each department and personnel; 2) regularly organizing crisis response exercises and simulations to test the feasibility and effectiveness of the plans.

For effective risk information assessment and archive management, the following measures are recommended to fully utilize the crisis preparedness toolbox: 1) Conduct risk assessment and archive management. 2) Establish and update emergency response plans. 3) Designate emergency contacts and maintain a contact list. 4) Provide training and drills. 5) Implement information systems and emergency communication. 6) Stockpile and allocate resources. 7) Focus on post-disaster recovery and psychological counseling. 8) Collaborate with external organizations and social forces.

3. How to develop a spokesperson system for news releases? Additionally, what suggestions do you have for crisis response?

Interviewee 1: Firstly, establish an organizational structure for the spokesperson system, typically organized by the publicity department under the name of a news office. The spokesperson should be relatively stable to ensure the stability and continuity of the work. The spokesperson must be familiar with the department or organization, have a high level of policy and theoretical knowledge, strong communication skills, and excellent language abilities. The spokesperson must adhere to discipline and release news information to the public based on organizational authorization. Their statements represent the organization's position and they are not allowed to release information in their personal capacity.

Interviewee 2: The establishment of a spokesperson system for news requires a comprehensive consideration of the school's characteristics, target audience, and other factors to ensure the rationality and effectiveness of the system. At the same time, the implementation of the system requires the support and cooperation of various departments within the school to truly play its role. In terms of crisis response, it is necessary to establish a sound emergency plan and warning mechanism as the basis, strengthen rapid response, communication, and

collaboration capabilities, continuously learn and improve, and enhance crisis management and response capabilities.

Interviewee 3: To establish a spokesperson system, firstly, establish sound daily work mechanisms. Secondly, establish standardized media reporter archives. Thirdly, establish a public opinion tracking mechanism and an evaluation mechanism for news releases. In terms of crisis response, it is important to verify information, conduct investigations and verify the crisis, obtain information through multiple channels, and actively take measures to solve problems and eliminate negative impacts.

Interviewee 4: The school should appoint a spokesperson based on the division of responsibilities within the crisis management team, and all policies and progress related to event handling and the school's stance should be unified and released by the spokesperson to avoid inconsistency and potential public opinion crisis. In terms of crisis response, it should be timely and multi-channel, maintaining good communication with the media and providing timely updates on the progress of the crisis event.

Interviewee 5: The process of establishing a spokesperson system includes the following steps: 1) Clarify the goals of the spokesperson system, 2) Select suitable individuals to serve as spokespersons, 3) Develop a news release plan, 4) Establish a news release process, including the review, modification, and publication of news materials, to ensure the standardization and efficiency of the process, and ensure the timeliness and accuracy of news releases, 5) Develop media response strategies, including how to respond to media inquiries, provide appropriate background information, and handle sensitive issues, and 6) Provide training for spokespersons to improve their professional qualities and response capabilities.

Interviewee 6: To establish a spokesperson system, it is necessary to define the role of the spokesperson, create a spokesperson training plan, establish crisis communication guidelines, and clarify the spokesperson's authority and responsibilities. In terms of crisis response, my suggestions include: timely response to the media and the public, providing accurate information, establishing crisis communication channels, coordinating internal and external communication, and maintaining transparency and credibility.

Interviewee 7: I believe that the establishment of a spokesperson system requires clarification of their responsibilities and authority. Spokespersons should act as a bridge between the school and the public, conveying the school's position and response measures in a timely, accurate, and comprehensive manner during crisis events. They should also possess good PR skills and crisis management capabilities.

Additionally, the school should provide necessary support and training to ensure that spokespersons can effectively fulfill their responsibilities. In terms of crisis response, the primary task is to ensure the safety of personnel. The school needs to establish a rapid and effective emergency response mechanism, including evacuation and rescue procedures. The school should also enhance coordination and cooperation with relevant departments to ensure timely support and assistance in the event of a crisis. Lastly, regular emergency drills should be conducted to improve the emergency response capabilities of staff and students.

Interviewee 8: The spokesperson system should involve designating one or two individuals within the school who will act as the spokespersons. They should speak in a unified voice in terms of language, wording, and stance. When necessary, their statements should be reviewed and approved by higher authorities to ensure consistency and credibility.

Interviewee 9: When establishing a spokesperson system, several key points should be considered. Firstly, clarify the roles and responsibilities of the spokesperson. They should possess media communication skills and crisis management knowledge, and be able to represent the school in conveying information to the public. Secondly, establish effective internal communication mechanisms. Spokespersons should maintain close contact with various departments to promptly obtain the latest information and respond to media and public concerns. Thirdly, provide relevant training for spokespersons to enhance their understanding of crisis management principles, media relationship-building, and crisis communication skills, thereby improving their ability to respond to unexpected events. As for crisis response, the following recommendations can be made: 1) Establish a crisis management team, 2) Timely and accurate dissemination of information, 3) Maintain transparency and integrity, actively communicate with the media and the public, and respond to concerns and questions in a timely manner to foster trust and maintain a good reputation. Lastly, learn from lessons and improve emergency plans. Every crisis event is a valuable lesson. Schools should promptly summarize their experiences, improve crisis management plans, and enhance response capabilities.

Interviewee 10: For the spokesperson system, I believe each organization should have internal regulations. When facing a crisis, the school will respond actively and prepare relevant news releases in advance, ensuring consistent messaging and unified spokespersons.

Interviewee 11: The suggestion for establishing a spokesperson system is to establish effective communication with the public, such as setting up a dedicated

hotline or service desk to provide consultation and support. In terms of crisis response, ensure timely provision of necessary assistance and support to meet the needs and concerns of the public.

Interviewee 12: To establish a spokesperson system, it is recommended to establish diverse communication channels, including websites, social media, and SMS notifications, to convey information in a timely manner. Provide accurate, clear, and timely information, respond to public concerns, and provide necessary assistance. As for crisis response, my suggestions are: 1) Establish a crisis management command center to unify command and coordinate actions of various departments; 2) After a crisis occurs, promptly release accurate and transparent information to avoid the spread of rumors; 3) Maintain transparency and integrity, actively communicate with the media and the public, and respond to concerns and doubts in a timely manner; and 4) Learn from lessons and improve emergency plans. Each crisis event is a valuable experience. Schools should promptly summarize their experiences, improve crisis management plans, and enhance response capabilities.

To establish a spokesperson system and fully utilize the emergency response button, the following measures are suggested: 1) Emergency command and coordination. 2) Information gathering and analysis. 3) Emergency notifications and alerts. 4) Evacuation and rescue operations. 5) Safety protection and control. 6) Media and public communication. 7) Post-event evaluation and recovery. 8) Collaboration with relevant rescue organizations, government departments, and social forces.

4. How to provide psychological counseling and support for students and staff? Additionally, what suggestions do you have for crisis recovery?

Interviewee 1: The first method is to strengthen students' understanding and recognition of crises through psychological crisis education and publicity, and enhance their ability to withstand setbacks, so as to prepare them for crisis response. The second method is to provide supportive interventions such as psychological counseling to help students in crisis understand the situation, regain psychological balance as soon as possible, and successfully overcome the crisis, as well as to master effective crisis response strategies.

Interviewee 2: Various measures need to be taken to provide psychological counseling and support for teachers, students, and staff, including professional psychological counseling, publicity and education, diversified service methods, personalized plans, psychological records, team building, online learning resources, social practice, strengthened communication and cooperation mechanisms, etc. Crisis

recovery is a comprehensive work that requires comprehensive consideration and implementation. By efforts in prevention and preparedness, rapid response, communication and collaboration, learning and improvement, technology and data support, personnel safety and health, crises can be effectively managed and normal operations can be resumed as soon as possible.

Interviewee 3: To provide psychological counseling and support, firstly, conduct a comprehensive analysis of the psychological health status of faculty, students, and staff. Secondly, develop a psychological health education plan. Thirdly, conduct targeted psychological health education courses and activities. In terms of crisis recovery, it is important to carry out publicity through electronic screens, bulletin boards, and exhibition boards, organize lectures, psychological class meetings, and activities such as drawing and essay competitions to bring happiness and education to participants.

Interviewee 4: I think it can be divided into three stages: before the crisis, during the crisis, and after the crisis. Before the crisis, training and drills can be conducted to enable teachers and students to face the crisis calmly. During the crisis, crisis team members can be dispatched to comfort teachers, students, and employees, and listen to their psychological needs. After the crisis, continuous psychological repair should be provided to teachers and students. In terms of crisis recovery, professional crisis teams should be responsible for psychological counseling, recovery of teaching and research progress, and reconstruction of facilities for teachers and students.

Interviewee 5: 1) Establish a special counseling group to provide professional psychological counseling and support for teachers, students, and staff. 2) Carry out mental health promotion and education activities to improve the mental health awareness and self-regulation ability of teachers, students, and staff. 3) Provide diversified psychological service methods, such as face-to-face counseling, telephone counseling, online counseling, etc., to meet different needs. 4) Develop personalized counseling and support plans based on specific situations, especially for teachers, students, and staff who are affected by the crisis or face special circumstances such as the pandemic or family issues. 5) Establish cooperation mechanisms with families, communities, etc., to jointly pay attention to the mental health status of teachers, students, and staff, and provide comprehensive support and assistance. In terms of crisis recovery, timely and transparent information sharing should be conducted to ensure that all relevant departments have a clear understanding. Communicate with stakeholders to let them understand the development of the crisis and response

measures. At the same time, actively cooperate with external organizations to jointly respond to the crisis. Utilize modern technology tools and data analysis capabilities to better respond to crises.

Interviewee 6: Methods to provide psychological counseling and support for teachers, students, and staff include establishing psychological counseling mechanisms, providing professional psychological support services, conducting mental health education, and strengthening team building and mutual support. In terms of crisis recovery, it is suggested to restore normal learning and working order as soon as possible, provide follow-up support and counseling, and pay attention to the mental health status of teachers, students, and staff.

Interviewee 7: I believe that after a crisis event, schools should immediately activate psychological support mechanisms to provide timely and professional psychological counseling and support for teachers, students, and staff. This can be achieved through setting up a psychological counseling hotline, conducting mental health lectures, and providing one-on-one counseling services. At the same time, schools can provide support such as adjusting curriculum schedules and giving them enough rest time. In addition, schools need to pay attention to the subsequent mental health status of teachers, students, and staff, and conduct regular mental health checks and assessments. I think the primary focus of crisis recovery is to restore normal teaching and living order. Schools need to repair damaged facilities as soon as possible to ensure the living and learning environment of teachers, students, and staff is restored. At the same time, schools also need to conduct comprehensive reflection and summarization of the crisis event, identify the root causes of problems, and formulate effective improvement measures to prevent similar incidents from happening again. In addition, schools need to strengthen communication with the public, handle the crisis openly and transparently, in order to restore public trust and support.

Interviewee 8: To provide psychological counseling and support to teachers, students, and staff, the school should establish a dedicated psychological counseling center and regularly or irregularly provide counseling services to teachers and students. The form can be online or offline, and the content can be discussions, group discussions, salons, or a mental health mailbox. In terms of crisis recovery, it is important to restore normal learning and working order as soon as possible, creating a stable and safe environment for teachers, students, and staff. For those who are heavily affected by the crisis, individual counseling and support should be provided. In addition, communication and cooperation with external institutions should be

strengthened to jointly respond to the crisis. The use of modern technology tools and data analysis capabilities will better help deal with crises.

Interviewee 9: In the event of a crisis, teachers, students, and staff often face enormous psychological pressure and distress. To provide psychological counseling and support, public universities in Nanjing can take the following measures: First, establish a professional psychological support team. Form a team composed of psychological experts to provide professional psychological assistance and support to affected teachers, students, and staff. These experts can provide help with emotional venting, psychological counseling, and problem-solving through individual counseling, support groups, or a psychological hotline. Second, conduct mental health education activities. Regularly conduct mental health education activities to improve the resilience of teachers, students, and staff. These activities can include mental health lectures, psychological skills training, and emergency psychological drills, helping them learn how to cope with the stress and distress caused by crisis events. Third, establish a psychological support network. Establish a supportive network platform where teachers, students, and staff can share their experiences and emotions. This network platform can be an online social media group or offline team activities, facilitating communication and mutual assistance among teachers, students, and staff. After the crisis event, it is important to continue providing psychological support and follow-up services to help teachers, students, and staff gradually recover to normal.

Interviewee 10: Our school has a dedicated psychological counseling room. If a crisis occurs, psychological counseling will be provided to teachers and students. In terms of crisis recovery, it mainly depends on the nature of the crisis. Generally, it involves rebuilding cohesion through publicity, improving everyone's confidence and determination to overcome the crisis, and working together to cope with it. Additionally, if possible, requesting support from higher-level departments or the society can also be considered.

Interviewee 11: To provide psychological counseling and support for teachers, students, and staff, it is recommended to establish emergency communication channels, such as psychological support hotlines or online counseling platforms, to facilitate access to help at any time. In terms of crisis recovery, it is advisable to conduct follow-up evaluations and improvements, summarize lessons learned, and develop improvement measures to enhance future crisis response capabilities.

Interviewee 12: Establish a dedicated mental health support center to provide psychological counseling and support services. Provide training and education on psychological coping and stress management for teachers, students, and staff. In

terms of crisis recovery, it is recommended to continue providing psychological support and follow-up services after the crisis, helping teachers, students, and staff gradually return to normal.

To provide psychological counseling and support for faculty, students, and staff, and fully utilize the healing medicine of crisis recovery, the following measures are advised: 1) Psychological counseling and support. 2) Facility and equipment repairs. 3) Adjustments to academic progress. 4) Publicity and image shaping. 5) Strengthen campus security. 6) Teacher training and support. 7) Community cooperation and support.

5. How to foster communication and sharing among sister institutions? Additionally, what suggestions do you have for the learning and reflection stage after a sudden crisis event occurs?

Interviewee 1: The first step is to establish partnership relations and sign cooperation agreements or memorandums of understanding with sister schools to clarify the areas and goals of cooperation. The second step is to regularly organize exchange meetings. The third step is student exchange and visits to promote mutual understanding and cooperation among students. The fourth step is to establish a sharing platform to achieve knowledge sharing and open access to resources. After a crisis event, the following suggestions can be made during the learning and summary phase: 1) Organize relevant personnel to hold experience sharing meetings to collectively summarize the lessons and experiences of the event and evaluate its impact and effectiveness in a comprehensive and objective manner. 2) Establish an event management file to record the process and response measures of the event as learning and reference materials for future similar events. 3) Revise and improve the existing emergency response plan and develop comprehensive and practical response strategies and measures based on the experience summarized from the event. 4) Strengthen training and exercises for relevant personnel to improve emergency response and decision-making capabilities, and enhance skills and experience in handling crisis events. 5) Strengthen coordination and communication between departments, establish a cross-departmental crisis event management mechanism, and form an effective cooperation and coordination mode.

Interviewee 2: To exchange and share crisis management experience with sister schools, we can take the following steps: 1) Understand the needs of universities and organize special lectures or workshops to share case studies. 2) Organize field visits and conduct collaborative research. 3) Train teachers, develop textbooks, and guidelines. After a crisis event, the following suggestions can be made during the

learning and summary phase: 1) Review the process. 2) Continuously improve. 3) Establish a record system.

Interviewee 3: To enhance communication and sharing among sister institutions, firstly, establish a regular communication mechanism to share experiences and achievements. Secondly, collaborate on relevant projects to pool wisdom and improve levels. Thirdly, establish an online communication platform to maintain constant contact and share information resources. In terms of learning and summarizing, establish crisis handling teams and leadership teams, command frontline responses to sudden events, collect and organize relevant materials for reflection and analysis afterward, and continue to revise and improve emergency response plans for various sudden crisis events.

Interviewee 4: I believe that by establishing partnership relations and organizing regular exchange activities, such as publishing experience-sharing articles, holding experience exchange conferences, and creating online platforms, we can share and exchange crisis management experiences with sister schools. After a crisis event, the first step should be to hold a summary meeting to review the response process and effectiveness, share experiences and lessons from all aspects, and then, based on the discussion content of the summary meeting, identify problems and areas for improvement, develop corresponding improvement plans with clear responsibilities and timelines, and disseminate the results of the summary and improvement plans to other relevant personnel for training and guidance. Continuously monitor and evaluate the effectiveness and update and adjust as needed.

Interviewee 5: To exchange and share crisis management experience with sister schools, it is important to first understand the needs and challenges of universities in crisis management, as well as their strengths and weaknesses. Then, invite experts or experienced administrator in crisis management to universities for lectures to share theory, practical experience, and techniques in crisis management. By sharing successful case studies, students and teachers in universities can learn how to respond, recover, and improve quickly in a crisis. Encourage the establishment of a linkage mechanism in crisis management among universities to be able to respond, support, and jointly deal with crises quickly when they occur. The use of big data and artificial intelligence technology for early warning and prediction of crises is a future development trend. At the same time, strengthen cooperation with governments and social organizations.

Interviewee 6: The exchange and sharing of experiences between sister schools can be carried out through the establishment of partnership relations, regular

exchange activities, and the sharing of experiences and case studies. During the learning and summary phase after a crisis event, it is recommended to conduct a comprehensive review of the lessons and learnings, identify problems and areas for improvement, and apply these experiences to future crisis response and prevention work.

Interviewee 7: We can organize workshops or conferences on this topic for management personnel, teachers, and student representatives from sister schools to learn from and exchange experiences with each other. We can also establish an online platform to share crisis management strategies, case studies, and other materials that can be accessed and learned from at any time. I believe that during the learning and summary phase, the first thing to do is to conduct a comprehensive and in-depth analysis of the crisis event to identify the root causes of the problem and develop effective improvement measures. Secondly, we need to evaluate the crisis management process to identify strengths and areas for improvement. Finally, we need to share the results of the learning and summary with the entire school community so that they can understand our efforts and achievements in crisis management and learn how to respond in similar situations in the future.

Interviewee 8: To exchange and share experiences with sister schools, it is important to establish a good mechanism, appoint liaison officers, and normalize communication and sharing. Activities such as academic conferences and departmental meetings can be organized to facilitate exchange and sharing of case studies and provide training to improve the efficiency of crisis management in universities. During the learning and summary phase after a crisis event, it is recommended to comprehensively analyze the causes and impacts of the event, identify strengths and areas for improvement in response measures, and develop emergency plans and measures that can adapt to different crisis events for faster and more effective handling of similar events.

Interviewee 9: Communication and sharing between sister schools are important for improving crisis event management capabilities. A dedicated communication platform, such as an online forum or regular meetings, should be established to facilitate effective communication between sister schools. This will allow schools to share their management experiences, preventive measures, and experiences in handling crisis events to learn from each other and improve together. During the learning and summary phase after a crisis event, schools should prioritize a comprehensive and in-depth analysis of the event, identify areas for improvement based on lessons learned, and develop improvement plans to address these areas.

Additionally, schools should strengthen training and education for relevant personnel to enhance their crisis management capabilities. A follow-up evaluation should also be conducted to understand the impact and effectiveness of the measures implemented.

Interviewee 10: Leading universities can organize regular sharing and exchange meetings to discuss and share experiences in handling similar events. If possible, the content of the discussions can be compiled and provided as reference materials for other universities.

Interviewee 11: Suggestions for communication and sharing between sister schools include appointing dedicated personnel for communication and contact, organizing online or offline meetings for exchange and sharing. During the learning and summary phase, it is recommended to 1) develop improvement plans based on experience and lessons learned, clarify the direction and focus of improvement for the next steps. 2) Strengthen training and education for relevant personnel based on the lessons learned, improve their crisis management capabilities and skills. 3) Conduct follow-up evaluations to understand the impact and effectiveness of the measures implemented.

Interviewee 12: It is recommended to hold experience sharing meetings: organize experience sharing meetings and invite relevant personnel to share their experience and lessons learned in handling events.

Evaluation Form

Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing

No	Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing	Suitability					Feasibility				
		5	4	3	2	1	5	4	3	2	1
With the goal of establishing an efficient emergency response team and fully utilizing the shield of crisis prevention											
1	Establish a crisis management team: Form a professional crisis management team responsible for developing crisis response strategies, coordinating resources, and communicating information to the public.										
2	Establish an early warning system: Gather and analyze relevant information to timely identify potential crises and gain valuable time for response.										
3	Develop emergency response plans: Create specific emergency response plans for potential crises, outlining response measures and assigning responsibilities.										
4	Enhance crisis awareness: Provide training to staff and students to increase their crisis awareness and response capabilities, thus strengthening the overall ability to adapt to crises.										
5	Establish information communication mechanisms: Establish effective communication mechanisms to ensure smooth internal communication within the organization and timely understanding of external environmental changes for preparedness.										

No	Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing	Suitability					Feasibility				
		5	4	3	2	1	5	4	3	2	1
6	Reserve emergency resources: Stockpile necessary emergency resources such as supplies, equipment, and facilities to ensure prompt deployment during crises.										
7	7Conduct drills and simulations: Regularly conduct drills and simulations to evaluate and enhance emergency response capabilities, and identify and improve any existing issues.										
8	Foster good relationships with government, media, and society: Maintain good communication and cooperation with government, media, and society to secure support and assistance in times of crises.										
9	Establish a crisis archive management system: Document and organize records of past crisis events, establishing an archive management system for reference and learning to prevent similar crises.										
10	Continuous learning and improvement: Continuously learn and improve methods and skills for crisis prevention, keep abreast of the latest trends and developments in crisis management domestically and internationally, and elevate the level of crisis prevention.										
Take risk information assessment and file management as the starting point and fully utilize the toolbox of crisis preparedness											
1	Conduct risk assessment and archive management: Ensure active participation and collaboration from various departments within the organization to promptly identify, assess, and control different types of risks, thus safeguarding the stable development of the organization.										

No	Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing	Suitability					Feasibility				
		5	4	3	2	1	5	4	3	2	1
2	Emergency plan formulation and updates: Establish comprehensive emergency plans, clearly defining emergency response measures and responsibilities for various types of crises.										
3	Emergency contacts and directories: Create emergency contacts and directories, including key personnel within the school and contact information for external emergency organizations. Ensure timely communication and coordination with relevant individuals in the event of an emergency.										
4	Training and drills: Conduct emergency drills and training to enhance the emergency response capabilities and skills of staff and students. This can include fire evacuation drills, natural disaster response exercises, emergency first aid training, etc.										
5	Information systems and emergency communications: Establish robust information systems and emergency communication networks to ensure the timely transmission and receipt of critical information during emergency situations. This can include SMS notification systems, online platforms for information dissemination, emergency broadcasting, etc.										
6	Resource reserves and deployment: Establish emergency resource reserves, including first aid equipment, food and water supplies, protective gear, etc. Develop resource deployment plans to ensure the timely mobilization and utilization of various resources during crises.										

No	Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing	Suitability					Feasibility				
		5	4	3	2	1	5	4	3	2	1
7	Post-disaster recovery and psychological support: Develop post-disaster recovery plans, including facility rebuilding, provision of psychological counseling and support, etc. Ensure that staff and students can resume normal life and learning in a timely manner.										
8	Collaboration with external organizations and societal forces: Establish connections and collaboration with relevant emergency organizations, medical institutions, security agencies, etc., to form a coordinated mechanism and resource sharing. Foster cooperation with societal forces to secure additional support and assistance.										
With the provision of psychological counseling and support for students and staff as the key, fully utilize the healing medicine of crisis recovery											
1	Emergency command and coordination: Establish an emergency command structure and chain of command, clearly define the division of responsibilities and command authority. Ensure timely and effective organization of emergency response to crisis events and coordination of departments, agencies, and rescue forces.										
2	Information collection and analysis: Timely gather and organize information related to the crisis event, conduct accurate information analysis and assessment. Ensure the scientific and accurate decision-making.										
3	Emergency notification and alerts: Use fast and accurate methods to send emergency notifications and alerts to teachers, students, and staff, including SMS, emails, mobile										

No	Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing	Suitability					Feasibility				
		5	4	3	2	1	5	4	3	2	1
	applications, etc. Ensure that individuals are promptly informed of the occurrence of the crisis event and the corresponding action instructions.										
4	Evacuation and rescue: Organize effective evacuation and rescue operations after the crisis event, ensuring the safety of teachers, students, and staff. Provide necessary first aid and medical assistance, and coordinate and cooperate with relevant rescue and medical institutions.										
5	Security protection and control: Strengthen campus security protection and control, and effectively control and isolate hazards. Establish necessary security measures and protection measures to ensure the personal safety and property security of teachers, students, and staff.										
6	Media and public communication: Maintain timely and effective communication with the media, release accurate and transparent information, prevent the spread of rumors and the expansion of panic. Also establish effective communication channels with the public, respond to their concerns, and provide necessary assistance.										
7	Post-event evaluation and recovery: Conduct comprehensive post-event evaluation and analysis after the crisis event ends, summarize experiences and lessons learned, improve emergency response mechanisms and preventive measures. Meanwhile, begin to restore normal order on campus, help										

No	Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing	Suitability					Feasibility				
		5	4	3	2	1	5	4	3	2	1
	teachers, students, and staff overcome the psychological pressure caused by the crisis event, and rebuild a stable and harmonious campus environment.										
8	Collaboration with relevant rescue organizations, government departments, and social forces is also an important component.										
With the provision of psychological counseling and support for students and staff as the key, fully utilize the healing medicine of crisis recovery											
1	Psychological counseling and support: Provide necessary psychological counseling and support for teachers, students, and staff to help them cope with the psychological trauma and stress caused by the crisis. Establish a mental health service mechanism, including professional psychological counseling, promotional education, diverse service methods, personalized plans, psychological profiles, team building, online learning resources, social practice, enhanced communication and exchange, and cooperation mechanisms.										
2	Facility and equipment repair: Repair and rebuild damaged or destroyed campus facilities and equipment, including classrooms, laboratories, dormitories, libraries, etc. Ensure that the campus environment can quickly return to normal operation.										
3	Adjusting academic progress: Make necessary adjustments and arrangements for the school's academic progress based on the impact of the crisis. Ensure that teachers and										

No	Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing	Suitability					Feasibility				
		5	4	3	2	1	5	4	3	2	1
	students can smoothly carry out teaching and learning activities, minimizing the impact of the crisis on the academic process.										
4	Publicity and image building: Actively publicize the school's response and recovery from the crisis, showcasing the school's determination and capabilities. Strengthen communication and cooperation with the media, convey positive and constructive information, and restore the school's reputation and image.										
5	Strengthen campus security: Strengthen campus security management and preventive measures, repair and reinforce security facilities, and improve the safety awareness and prevention capabilities of teachers, students, and staff. Conduct regular safety drills and training to enhance emergency response capabilities.										
6	Teacher training and support: Provide necessary training and support to help teachers adapt to the new teaching environment after the crisis. Communicate and engage with teachers, understand their needs and difficulties, and provide appropriate support and assistance.										
7	Community cooperation and support: Establish cooperative relationships with external communities to gain more support and resources. Collaborate with government agencies, social organizations, and businesses to jointly promote the recovery and development of the campus.										

No	Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing	Suitability					Feasibility				
		5	4	3	2	1	5	4	3	2	1
Using the exchange and sharing among sister institutions as the means, fully utilize the signpost of learning and reflection after a sudden crisis event occurs											
1	Exchange and sharing among sister institutions: By understanding the needs of universities, organizing special lectures, sharing case studies, establishing communication platforms, organizing field visits, conducting collaborative research, developing textbooks and guidelines, establishing linkage mechanisms, and utilizing modern technology, effective communication and sharing of experiences in managing crisis events can be achieved with other universities.										
2	Incident review: Sorting and organizing the process of the crisis event, including the cause, development, actions, and measures taken by relevant parties.										
3	Information collection and organization: Collecting and organizing various data and information related to the crisis event, including on-site survey reports, statements from relevant individuals and witnesses, and documents and records from relevant parties.										
4	Problem identification and analysis: Analyzing the issues and loopholes in the event, including inadequate organizational management and insufficient security measures, as well as the deficiencies and mistakes of relevant parties in responding to the crisis.										
5	Lesson learned: Drawing lessons from the event, summarizing experiences and lessons learned, and identifying areas and measures										

No	Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing	Suitability					Feasibility				
		5	4	3	2	1	5	4	3	2	1
	that need improvement to prevent similar events from recurring.										
6	Report writing: Based on the analysis and summary, preparing a detailed summary report including the background of the event, the incident process, problem analysis, and improvement recommendations.										
7	Wrap-up meeting: Organizing a wrap-up meeting with relevant personnel to present the summary report, discuss further improvement measures, and develop an action plan.										
8	Driving improvement measures: Based on the summary report and discussions in the meeting, driving relevant departments and individuals to take improvement measures and establishing appropriate monitoring mechanisms to ensure the effectiveness of these measures.										
9	Feedback and communication: Providing the summary report and updates on the implementation of improvement measures to relevant parties and the public, and timely responding to concerns and questions.										

Appendix D

The Results of the Quality Analysis of Research Instruments

The index of objective congruence (IOC)

Guidelines for Improving the Efficiency of Sudden Crisis Event Management in Public Universities in Nanjing

NO	The Current situation of the efficiency of sudden crisis event management in public universities in Nanjing	Experts					IOC	Validlity
		No1	No2	No3	No4	No5		
Crisis Prevention								
1	Establishing a team of security personnel combining full-time and part-time staff can effectively prevent the occurrence of emergency crises.	1	1	1	1	1	1	valid
2	Establishing an experienced, adequately staffed, and responsive expert group capable of handling different types of emergencies plays an important role in preventing sudden crises.	1	1	1	1	1	1	valid
3	Strengthening the training and assessment of security personnel plays an important role in the stage of crisis prevention.	1	1	1	0	1	0.80	valid
4	Investing in safety facilities and equipment plays an important role in the stage of crisis prevention.	1	1	1	1	1	1	valid
5	The reserve of emergency supplies plays an important role in the stage of crisis prevention.	1	1	1	1	1	1	valid

NO	The Current situation of the efficiency of sudden crisis event management in public universities in Nanjing	Experts					IOC	Validlity
		No1	No2	No3	No4	No5		
6	The involvement of all staff members plays an important role in preventing the occurrence of sudden crisis events.	1	1	1	1	1	1	valid
7	Establishing a three-level emergency group consisting of school-department-class plays an important role in preventing the occurrence of sudden crisis events.	1	1	1	1	1	1	valid
8	The attention of school leadership helps in formulating emergency plans to respond to different crisis situations.	1	1	1	1	0	0.80	valid
9	Investing in emergency funds plays an important role in the stage of crisis prevention.	1	1	1	0	1	0.80	valid
10	The objectivity and rationality of crisis assessment help in formulating emergency plans to respond to different crisis situations.	1	1	1	1	1	1	Valid
Crisis Preparedness								
1	Offering safety knowledge courses and lectures, conducting safety promotions, can effectively prepare for crisis management.	1	1	1	1	1	1	valid
2	Doing risk information assessment and file management can effectively	1	1	1	1	1	1	valid

NO	The Current situation of the efficiency of sudden crisis event management in public universities in Nanjing	Experts					IOC	Validlity
		No1	No2	No3	No4	No5		
	prepare for crisis management.							
3	Increasing the proportion of emergency drills and exercises conducted by all teachers and students in the school can effectively prepare for crisis management.	1	0	1	1	1	0.80	valid
4	Making all teachers and students in the school clear about various types of emergency event hotline numbers and social reporting channels can effectively prepare for crisis management.	1	1	0	1	1	0.80	valid
5	Increasing the proportion of teachers and students in the school receiving emergency training can effectively prepare for crisis management.	1	1	1	1	1	1	valid
6	Normalizing the duty system, strengthening campus patrols and security management to ensure campus safety and order, can effectively prepare for crisis management.	1	1	1	1	1	1	valid
7	Establishing comprehensive emergency plans, clarifying emergency response measures and division of responsibilities for various types of emergencies, is helpful for handling sudden crisis events	1	1	0	0	1	0.60	valid

NO	The Current situation of the efficiency of sudden crisis event management in public universities in Nanjing	Experts					IOC	Validlity
		No1	No2	No3	No4	No5		
	in universities.							
8	Establishing an emergency contact directory including key personnel within the school and external emergency organizations, facilitates timely communication and coordination during emergencies.	1	1	1	1	1	1	valid
9	Establishing information systems and emergency communication networks including SMS notification systems, online platforms, and emergency broadcasts, facilitates timely transmission and receipt of important information in emergency situations.	1	1	1	1	1	1	valid
10	Establishing connections and cooperation with relevant emergency organizations, medical institutions, and security agencies, forming linkage mechanisms and resource sharing, is beneficial for obtaining more support and assistance	1	0	1	1	1	0.80	valid
Crisis Response								
1	Establishing an emergency command structure and chain of command, clarifying	1	1	1	1	1	1	valid

NO	The Current situation of the efficiency of sudden crisis event management in public universities in Nanjing	Experts					IOC	Validlity
		No1	No2	No3	No4	No5		
	responsibilities and command authority, can effectively respond to sudden crisis events							
2	Timely and effective organization of emergency response to crisis events and coordination of departments, institutions, and rescue forces can effectively respond to sudden crisis events	0	1	1	1	1	0.80	valid
3	Establishing effective communication with the public, addressing their concerns and providing necessary assistance, is one of the important ways to respond to crises	1	0	1	1	1	0.80	valid
4	Accurate information collection and analysis can ensure the scientific and accurate decision-making	1	1	1	1	1	1	valid
5	Emergency notifications and alarms can ensure that individuals are promptly informed of the occurrence of a crisis event and receive corresponding action instructions	1	1	1	1	1	1	valid
6	Strengthening campus security protection, quickly evacuating, controlling, and isolating	1	1	1	1	1	1	valid

NO	The Current situation of the efficiency of sudden crisis event management in public universities in Nanjing	Experts					IOC	Validlity
		No1	No2	No3	No4	No5		
	hazards, is one of the important tasks in emergency control							
7	Necessary first aid and medical rescue, along with coordination and cooperation with relevant rescue and medical institutions, are important approaches to emergency response	1	1	1	1	1	1	valid
8	Establishing a spokesperson system is an important measure to respond to public opinion crises	1	1	1	1	1	1	valid
9	Establishing necessary safety measures and protection measures to ensure the personal and property safety of students, staff, and employees is one of the important tasks in emergency control	1	1	1	1	1	1	valid
10	Timely collection and organization of information related to the crisis event, accurate information analysis and assessment, can effectively respond to sudden crisis events	1	1	1	1	0	0.80	valid
11	Organizing effective evacuation and rescue operations after a crisis event occurs can ensure	1	1	1	1	1	1	valid

NO	The Current situation of the efficiency of sudden crisis event management in public universities in Nanjing	Experts					IOC	Validlity
		No1	No2	No3	No4	No5		
	the safety of students, staff, and employees							
12	Timely and effective communication with the media, releasing accurate and transparent information, prevents the spread of rumors and the proliferation of panic	1	1	1	1	1	1	valid
13	The supply of emergency and first aid facilities and materials is the material basis for crisis management	1	1	1	1	1	1	valid
14	Communication and collaboration with relevant individuals within and outside the school is a key aspect of emergency coordination	1	1	1	1	0	0.80	valid
Crisis Recovery								
1	Conducting comprehensive post-assessment and analysis, summarizing experiences and lessons learned, and improving emergency response mechanisms and preventive measures	1	1	1	1	1	1	valid
2	Providing necessary psychological counseling and support to students, staff, and employees to help them cope with the psychological trauma and stress caused by the crisis event	1	1	1	1	1	1	valid

NO	The Current situation of the efficiency of sudden crisis event management in public universities in Nanjing	Experts					IOC	Validlity
		No1	No2	No3	No4	No5		
3	Repairing and rebuilding damaged or destroyed campus facilities and equipment to expedite the return to normal operations	1	1	1	1	1	1	valid
4	Imposing sanctions on responsible individuals and rewarding relevant personnel	1	1	1	1	1	1	valid
5	Making necessary adjustments and arrangements to the school's teaching schedule based on the impact of the crisis event to minimize its impact on the educational process	0	1	1	1	1	0.80	valid
6	improving communication and cooperation with the media, delivering positive and constructive information to restore the school's reputation	1	1	1	1	1	1	valid
7	Actively promoting the school's crisis response efforts to demonstrate the determination and capabilities of the school, improving its image	1	1	1	1	1	1	valid
8	Strengthening campus security management and preventive measures, repairing and reinforcing security facilities, and improving the safety awareness and preparedness of students, staff, and	1	1	1	1	1	1	valid

NO	The Current situation of the efficiency of sudden crisis event management in public universities in Nanjing	Experts					IOC	Validlity
		No1	No2	No3	No4	No5		
	employees to mitigate the impact of sudden crisis events							
9	Providing necessary training and support, communicating with students and teachers to help them adapt to the new environment after the crisis event	1	1	1	1	1	1	valid
10	Collaborating with government, social organizations, and businesses to promote the recovery and development of the campus after the crisis event	0	1	1	1	1	0.80	valid
Learning and Reflection								
1	Summary of experience and lessons learned, identify problems and deficiencies in the event, and provide directions for improvement and prevention in the future	1	1	1	1	1	1	valid
2	Sharing experiences among sister colleges can promote effective management of emergencies on campus and even in society	0	1	1	1	1	0.80	valid
3	Collecting and archiving various cases related to campus incidents is conducive to summarizing experience and providing references for future work	1	1	1	1	1	1	valid

NO	The Current situation of the efficiency of sudden crisis event management in public universities in Nanjing	Experts					IOC	Validlity
		No1	No2	No3	No4	No5		
4	Evaluate the emergency response effectiveness of the school in crisis events, including leadership decision-making, command and organization, information dissemination, evacuation and rescue, etc. Determine the successful experiences and shortcomings in emergency response, and provide reference and guidance for future emergency work	1	1	1	1	1	1	valid
5	Improve measures and establish corresponding supervision mechanisms to ensure the effective implementation of improvement measures	1	1	1	1	1	1	valid
6	Provide a summary report and the implementation of improvement measures to relevant parties and the public in a timely manner, and respond to concerns and questions from all parties. This helps improve and enhance the level of management and prevention of emergencies in universities	1	0	0	1	1	0.60	valid

NO	The Current situation of the efficiency of sudden crisis event management in public universities in Nanjing	Experts					IOC	Validlity
		No1	No2	No3	No4	No5		
7	Conduct a comprehensive review and in-depth analysis of the occurrence of emergencies, including the causes, processes, response measures, and evaluation of effects	1	1	1	1	1	1	Valid
8	Evaluate the communication and information management of the school in crisis events, including the effectiveness of information collection, processing, and dissemination, as well as communication with faculty, students, staff, and the public. Determine the strengths and improvement areas in communication and information management, and improve the accuracy, timeliness, and transparency of information	1	1	1	1	1	1	valid
9	Organize the lessons learned into a knowledge base for future reference and training. This helps share experiences and improve the crisis management awareness and abilities of all staff	1	1	1	1	1	1	valid
10	Organize training and simulation exercises based on the lessons learned to improve	0	1	0	1	1	0.60	valid

NO	The Current situation of the efficiency of sudden crisis event management in public universities in Nanjing	Experts					IOC	Validlity
		No1	No2	No3	No4	No5		
	the emergency response and coordination abilities of faculty and staff. Through practical training, strengthen teamwork and crisis response capabilities							

Appendix E

Certificate of English

BANSOMDEJCHAOPRAYA
RAJABHAT UNIVERSITY

This is to certify that

Mrs. Wu Jie

Achieved BSRU English Proficiency Test (BSRU-TEP) level

C2

Given on 22nd August 2021

(Assistant Professor Dr Kulsirin Aphiratvoradej)

Director

Appendix F

The Document for Acceptance Research

มหาวิทยาลัยมหาจุฬาลงกรณราชวิทยาลัย
วิทยาเขตนครศรีธรรมราช
๓/๓ ม.๕ ต.มะม่วงสองต้น อ.เมือง จ.นครศรีธรรมราช ๘๐๐๐๐
โทร. ๐๗๕-๓๔๒๘๙๘ โทรสาร ๐๗๕-๓๔๕๘๖๒

อว.๘๐๒๗ / ๑๐๑

๘ พฤษภาคม ๒๕๖๗

เรื่อง รับรองการลงบทความวิจัยเพื่อตีพิมพ์ในวารสารมหาจุฬานาครทรรศน์

เรียน นางอู๋ เจี๋ย

ตามที่ **นางอู๋ เจี๋ย และรองศาสตราจารย์ ดร.นิรันดร์ สุธีนิรันดร์ ผู้ช่วยศาสตราจารย์ ดร.คณากร สว่างเจริญ และผู้ช่วยศาสตราจารย์ ดร.พัชรา เดชโฮม** ได้ส่งบทความวิจัยเรื่อง **"แนวทางการปรับปรุงประสิทธิภาพของการจัดการเหตุการณ์วิกฤติฉับพลันในมหาวิทยาลัยของรัฐในหนานจิง"** เพื่อพิจารณาตีพิมพ์ในวารสารมหาจุฬานาครทรรศน์ มหาวิทยาลัยมหาจุฬาลงกรณราชวิทยาลัย วิทยาเขตนครศรีธรรมราช ซึ่งได้รับการคัดเลือกเข้าสู่ฐานข้อมูล ของศูนย์ดัชนีการอ้างอิงวารสารไทย (ศูนย์ TCI) ได้ถูกจัดกลุ่มคุณภาพวารสารประจำปี พ.ศ. ๒๕๖๒ ให้เป็น วารสารที่มีคุณภาพกลุ่มที่ ๒ (TCI ฐาน ๒) และอยู่ในฐานข้อมูล TCI จนถึง ๓๑ ธันวาคม ๒๕๖๗ โดยจะดำเนินการจัดพิมพ์ในฉบับต่อไปตามระยะเวลาที่ได้กำหนดไว้ และวารสารมหาจุฬานาครทรรศน์ได้รับบทความวิจัยของท่านเป็นที่เรียบร้อยแล้วนั้น

ในการนี้ วารสารมหาจุฬานาครทรรศน์ มหาวิทยาลัยมหาจุฬาลงกรณราชวิทยาลัย วิทยาเขตนครศรีธรรมราช ขอรับรองว่าบทความของท่านได้ผ่านตอบรับเพื่อพิจารณาบทความตีพิมพ์เผยแพร่ในปีที่ ๑๑ ฉบับที่ ๖ (มิถุนายน ๒๕๖๗) นี้ ซึ่งภายหลังจากนี้บทความจะผ่านการตรวจสอบความถูกต้องทางวิชาการ โดยกองบรรณาธิการวารสารฯ และผู้ทรงคุณวุฒิต่อไป

จึงเรียนมาเพื่อโปรดทราบและดำเนินการต่อไป

เรียนมาด้วยความเคารพ

(นางสาวปุญญาดา จงละเอียด)
บรรณาธิการวารสารมหาจุฬานาครทรรศน์
มหาวิทยาลัยมหาจุฬาลงกรณราชวิทยาลัย วิทยาเขตนครศรีธรรมราช

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