

# Practical Dilemmas and Optimization Pathways in the Dissemination of Emergency Safety Culture from the Perspective of Risk Society: An Empirical Study Based on University Association Practices

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**Abstract:** In the context of a risk society, emergency safety culture, as a core component of the national public safety system, sees the quality of its dissemination and education directly impacting the enhancement of societal risk resilience. Universities, serving as crucial platforms for talent cultivation and cultural dissemination, conduct emergency safety culture dissemination and education as a key pathway to improve the safety literacy of youth groups and build a safe campus environment<sup>[1]</sup>. Based on Constructivism Theory and Risk Communication Theory, this paper employs literature review, questionnaire surveys, and case analysis, taking the practices of university emergency safety culture dissemination associations as research samples to systematically analyze the practical dilemmas currently existing in the dissemination and education of emergency safety culture regarding content supply, dissemination mechanisms, practice models, and support systems<sup>[2]</sup>. The study finds that current emergency safety culture dissemination and education face issues such as severe content homogenization, singular dissemination channels, insufficient practical engagement, and imperfect support mechanisms. Therefore, this paper proposes optimization pathways for emergency safety culture dissemination and education from four dimensions: precise content construction, a diversified dissemination matrix, immersive practice design, and a systematic support system. This aims to provide theoretical reference and practical insights for enhancing the effectiveness of emergency safety culture dissemination and education in universities and fostering the safety literacy of youth groups.

**Keywords:** Emergency Safety Culture; University Associations; Practical Dilemmas; Optimization Pathways

## Introduction

Against the backdrop of a risk society, the frequent occurrence of various emergencies poses severe challenges to social governance and public safety assurance. As the spiritual core of the public safety system, the quality of emergency safety culture dissemination and education directly affects the enhancement of societal risk resilience. Universities, serving as core hubs where youth gather and cultural dissemination occurs, implement emergency safety culture dissemination and education as a critical pathway to improve the safety literacy of college students and foster a safe campus environment. However, emergencies in universities in recent years have exposed issues such as insufficient safety knowledge, weak awareness, and inadequate self-and mutual-rescue capabilities among some students, revealing gaps in related education within higher education institutions. In this context, student organizations such as university emergency safety culture dissemination associations have emerged, offering new platforms and pathways for the popularization of emergency safety culture through student-led and practice-oriented operational models. Based on Constructivism Theory and Risk Communication Theory, this paper employs literature review, questionnaire surveys, and case analysis, using university association practices as research samples to systematically analyze the current practical dilemmas in emergency safety culture dissemination and education regarding content, dissemination, practice, and support mechanisms. It proposes optimization pathways to provide theoretical reference and practical insights for enhancing the effectiveness of such education and cultivating the safety literacy of young people.

## **1. Research on the Current Status of Emergency Safety Culture Dissemination in Universities**

### ***1.1 The Practical Status of Emergency Safety Culture Dissemination in Universities***

#### ***1.1.1 Diversification of Educational Actors in Dissemination***

The current dissemination and education of emergency safety culture in universities exhibit a diversified characteristic in terms of its main actors, primarily including university administrative departments, colleges, and student associations. Among these, university administrative departments (such as the Security Office and the Student Affairs Office) are mainly responsible for formulating emergency safety management regulations and organizing university-wide emergency drills. Colleges primarily conduct targeted emergency safety education activities, such as themed class meetings and safety lectures. Student associations serve as important supplementary forces, promoting the dissemination and popularization of emergency safety culture by organizing activities such as safety knowledge competitions, emergency skills training, and safety awareness poster design contests. This survey reveals that 68.33% of students reported having participated in emergency safety education activities organized by the university, while 31.67% indicated involvement in emergency safety culture dissemination activities organized by student associations.

#### ***1.1.2 Broad Coverage of Educational Content in Dissemination***

The content of emergency safety culture dissemination and education in universities encompasses multiple domains, including natural disasters, accident disasters, public health incidents, and social safety incidents. It primarily covers areas such as emergency safety knowledge, emergency response skills, safety laws and regulations, and safety concepts. This survey indicates that students are most concerned with the following emergency safety topics, in order: fire safety knowledge (78.56%), traffic safety knowledge (72.34%), food safety knowledge (68.74%), emergency self-and mutual-rescue skills (65.42%), and cybersecurity knowledge (62.10%).

#### ***1.1.3 Continuous Enrichment of Dissemination and Education Channels***

The channels for disseminating and educating on emergency safety culture in universities are continuously diversifying, primarily encompassing offline lectures, training sessions, emergency drills, online official platforms, social media accounts, and online course platforms. Traditional offline methods, such as safety lectures and emergency evacuation drills, offer strong interactivity and practicality, yet they are often limited by time and space, resulting in relatively low coverage. In contrast, emerging online channels, including official WeChat public accounts, university websites, and online course platforms, facilitate rapid and extensive information dissemination. This survey indicates that the main channels through which students acquire emergency safety knowledge are: official WeChat public accounts (70.15%), campus publicity materials (65.82%), safety education lectures (60.44%), online course platforms (55.21%), and emergency drill activities (48.73%).

#### ***1.1.4 Strong Student Willingness to Participate***

The findings of this survey indicate that a majority of students possess a strong willingness to participate in emergency safety culture dissemination and education. Specifically, 76.35% of students reported that they are "willing" or "very willing" to participate in emergency safety culture dissemination activities; 68.74% of students consider such education "very important" or "important"; and 59.61% of students expressed a desire for the university to "increase" or "significantly increase" the frequency of emergency safety culture dissemination and education activities.

## **2. Practical Dilemmas in Emergency Safety Culture Dissemination in Universities**

### ***2.1 Homogenization of Content Supply***

#### ***2.1.1 Repetitive and Monotonous Content***

The content of current emergency safety culture dissemination and education in universities predominantly focuses on traditional areas such as fire safety and traffic safety, while paying insufficient attention to emerging fields like cybersecurity, psychological crisis, campus bullying, and sudden public health incidents. At the same time, the educational content delivered by different actors shows a high degree of repetition, lacking innovation and specificity. This survey reveals that 62.38% of students believe the current content of emergency safety culture dissemination and education is

"repetitive and monotonous," and 58.74% of students express a strong demand for knowledge in emerging areas such as "cybersecurity" and "psychological crisis response."

### **2.1.2 Low Degree of Supply-Demand Matching**

The design of educational content for emergency safety culture dissemination in universities is predominantly led by university administrative departments or student association leaders, lacking in-depth investigation and analysis of students' actual needs, which results in a significant gap between the content supplied and student demand<sup>[3]</sup>. For instance, while some students are more concerned with practical, hands-on emergency self-and mutual-rescue skills training, most dissemination and education activities conducted by universities primarily focus on theoretical explanations, lacking sufficient practical application. This survey indicates that 56.43% of students believe the current content of emergency safety culture dissemination and education "does not align with their personal needs," and 68.91% of students expressed a desire for increased "practical, hands-on emergency skills training."

## **2.2 Singularity of Dissemination Mechanisms**

### **2.2.1 Lack of Integration in Dissemination Channels**

Although the channels for emergency safety culture dissemination and education in universities are continuously diversifying, there is a lack of effective integration and coordination among different channels, resulting in a situation where they "operate in isolation." For instance, university administrative departments primarily conduct educational activities through traditional channels such as classroom teaching and emergency drills, while student associations mainly carry out dissemination activities via new media platforms. The absence of collaborative synergy between these actors significantly diminishes the overall effectiveness of dissemination. This survey reveals that 59.20% of students believe the current emergency safety culture dissemination and education suffers from a "lack of integration in dissemination channels," and 63.49% of students expressed a desire to "integrate various dissemination channels to form a coordinated dissemination synergy."

### **2.2.2 Lack of Interactivity**

Traditional emergency safety culture dissemination and education predominantly adopts a one-way, didactic approach, lacking interactive communication with students. This places students in a passive, receptive role, making it difficult to fully mobilize their proactive engagement. Although some student associations utilize new media platforms for dissemination activities, these efforts largely consist of posting static content such as images, text, and videos. There is a notable absence of interactive formats like live interactive sessions, online Q&A, and topic discussions, which undermines the effectiveness of dissemination. This survey indicates that 65.31% of students perceive a "lack of interactivity" in current emergency safety culture dissemination and education, and 70.26% of students expressed a desire for an increase in "interactive and participatory" forms of dissemination.

## **2.3 Superficialization of Practical Models**

### **2.3.1 Singularity in the Forms of Practical Activities**

The current practical activities for emergency safety culture dissemination and education in universities predominantly rely on traditional forms such as emergency drills and skills training, lacking innovation and appeal. Some emergency drills have become mere formalities, characterized by simplistic scenario setups and fixed procedures, which fail to simulate real emergency situations effectively. Consequently, student enthusiasm for participation remains low<sup>[4]</sup>. This survey indicates that 58.37% of students believe the current practical activities for emergency safety culture are "singular in form and lacking in innovation," while 64.18% of students expressed a desire to participate in "immersive and experiential" practical activities.

### **2.3.2 High Barriers to Participation in Practical Activities**

Certain emergency safety practical activities, such as professional emergency skills training and large-scale emergency drills, impose relatively high requirements regarding venues, equipment, and instructor expertise, which results in high participation barriers and makes it difficult to reach the entire student body. Furthermore, the scheduling of these practical activities often conflicts with students' academic courses or other association commitments, which also affects student participation to a certain extent. This survey reveals that 53.66% of students cited "high participation barriers" or "scheduling conflicts" as reasons for not having participated in emergency safety practical activities.

### ***2.3.3 Insufficient Translation of Practical Effects into Capabilities***

Current practical activities for emergency safety culture dissemination and education in universities often prioritize formal execution over substance, lacking mechanisms to track outcomes and gather feedback. As a result, the emergency knowledge and skills students acquire during these activities are difficult to consolidate and apply in their daily lives, preventing the practical effects from being effectively translated into tangible emergency response capabilities. This survey indicates that 61.41% of students believe "the knowledge gained from practice is hard to apply in real-life situations," and 57.81% of students expressed a desire to establish a "tracking and feedback mechanism for practical outcomes"

## **3. Optimization Pathways for Emergency Safety Culture Dissemination in Universities**

### ***3.1 Precise Content Construction***

#### ***3.1.1 Conduct Needs Assessments to Achieve Content Customization***

Universities should employ methods such as questionnaire surveys and in-depth interviews to gain a thorough understanding of the emergency safety knowledge requirements and cognitive status of students across different grades, majors, and genders, thereby establishing a database of student emergency safety needs. Based on students' actual requirements and in conjunction with the characteristics of campus emergencies, universities should customize dissemination and educational content. This involves placing emphasis on expanding content in emerging areas such as cybersecurity, psychological crisis response, campus bullying prevention, and the management of sudden public health incidents, while also addressing the specific needs of different groups (e.g., campus safety adaptation for freshmen, job-seeking safety for graduating students).

#### ***3.1.2 Optimize Content Structure to Achieve Knowledge Systematization***

Construct a content system for emergency safety culture dissemination and education based on the framework of "theoretical foundation + practical skills + case analysis + value guidance." The theoretical foundation component focuses on explaining core concepts of emergency safety, relevant laws and regulations, and risk identification. The practical skills component concentrates on hands-on training for highly applicable skills such as fire extinguisher operation, cardiopulmonary resuscitation (CPR), wound dressing, fire escape, and self-rescue in drowning incidents. The case analysis component selects typical emergency cases from both campus and societal contexts, providing an in-depth analysis of incident causes, response processes, and lessons learned. The value guidance component integrates life education and responsibility awareness, guiding students in cultivating the value concept of "safety first, life paramount."

#### ***3.1.3 Innovate Content Presentation Forms to Achieve Vivid Expression***

Utilize diverse formats such as AI technology, music, art, and situational dramas to transform dry safety knowledge into vivid and easily understandable content mediums. For instance, drawing inspiration from Hubei's cross-integration model of "Public Safety Open Course" combining "AI + Music + Ideological Education + Safety," create emergency safety-themed rap songs, situational dramas, and animated short films. This allows students to learn safety knowledge through entertaining and educational means. Additionally, compile visually illustrated and easily comprehensible emergency safety knowledge manuals and pocket-sized handbooks to facilitate students' convenient access and learning anytime, anywhere.

### **3.2 Diversified Communication Matrix**

#### ***3.2.1 Integrate Communication Channels to Build a Collaborative Communication Network***

Break down the barriers between traditional and emerging channels to construct a diversified communication matrix encompassing "classroom teaching, campus platforms, new media platforms, and social collaboration." Classroom teaching serves as the primary channel by incorporating emergency safety culture education into the university's talent cultivation system and offering compulsory or elective courses. Campus platforms (such as bulletin boards, radio stations, and campus television) function as supplementary channels to foster a strong campus safety culture atmosphere. New media platforms (including WeChat official accounts, Weibo, Douyin, and video channels) act as core dissemination channels for conducting interactive and fragmented communication. Social

collaboration channels (such as university-local government partnerships and family-school coordination) serve as extended channels to promote the radiation of emergency safety culture into families and society at large.

### **3.2.2 Innovate Communication Formats to Enhance Interactive Experience**

Leverage new media technologies to innovate communication formats, thereby enhancing students' sense of participation and experience. For example, launch interactive sections such as "Emergency Safety Knowledge Q&A" and "Emergency Case Analysis" on official WeChat public accounts, and regularly conduct online quiz and prize draw activities. On platforms like Douyin and video channels, introduce content such as "Emergency Skills Challenges" and "Live Safety Knowledge Lectures," inviting professionals like firefighters, medical personnel, and police officers to engage in online interactive Q&A sessions. Utilize VR/AR technology to create virtual emergency safety experience centers, allowing students to learn emergency knowledge and skills through immersive experiences.

### **3.2.3 Strengthen Topic Engagement to Expand Dissemination Impact**

Focus on hot topics related to emergency safety, such as holiday safety, laboratory safety, and online fraud prevention, by planning thematic communication series and conducting topic engagement campaigns supported by a KOL matrix. Encourage student associations and student leaders to act as campus safety KOLs, sharing emergency safety knowledge and experiences. Through a "students leading families" model, guide students to extend campus emergency safety culture dissemination activities to their families, thereby fostering a virtuous communication cycle that connects the campus, family, and society, and ultimately expanding the reach and impact of dissemination.

## **3.3 Immersive Practical Design**

### **3.3.1 Create Immersive Practical Scenarios**

Drawing on the experience of the Guangzhou Public Emergency Safety Experience Center in Guangdong Province, create a campus-based immersive emergency safety experience facility. This facility should include multiple functional zones, such as a fire escape experience area, an earthquake simulation zone, a traffic safety simulation zone, and an emergency skills training area. Utilize special effects like sound, lighting, and electricity to simulate realistic emergency scenarios, enabling students to enhance their emergency response capabilities through immersive experiences. For instance, the fire escape experience area could feature authentic scene elements like smoke-filled corridors, heated doorknobs, and emergency indicator lights, allowing students to master proper evacuation methods. In the earthquake simulation zone, equipment such as vibrating platforms and shaking walls can be used to help students perceive seismic intensities of different magnitudes and learn emergency avoidance skills.

### **3.3.2 Innovate the Forms of Practical Activities**

Develop diversified, low-barrier emergency safety practical activities to meet the participation needs of different students. For instance, organize mass participation activities such as an Emergency Safety Culture Festival, safety knowledge competitions, and Emergency Skills Challenge Competitions. Implement a series of activities titled "Bringing Emergency Safety into Dormitories, Classrooms, and Student Associations" to integrate practical activities into students' daily lives. Utilize after-school hours to conduct small-scale, regular emergency drills, such as dormitory fire evacuation drills and classroom emergency evacuation exercises, thereby increasing the coverage and accessibility of practical activities.

### **3.3.3 Establish a Mechanism for Translating Practical Outcomes into Capabilities**

Establish a closed-loop mechanism of "practice-feedback-consolidation" to ensure the effective translation of practical outcomes into capabilities. Following the completion of practical activities, collect student feedback through methods such as questionnaire surveys and discussion forums to promptly optimize the design of future activities<sup>[4]</sup>. Regularly organize events like practical outcome showcases and experience-sharing sessions, allowing students to share their insights and gains. Integrate emergency safety practices into the student comprehensive quality evaluation system, encouraging students to proactively apply the knowledge and skills they have acquired in their daily lives, thereby fostering a positive situation of "integration of knowledge and action"<sup>[5]</sup>.

### **3.4 Systematic Support System**

#### **3.4.1 Improve Institutional Support to Standardize Work Implementation**

Universities should establish and improve relevant systems for emergency safety culture dissemination and education, clearly defining the objectives and tasks, content structure, implementation pathways, and responsible entities. These systems should be integrated into the university's overall development plan and talent cultivation system. Concurrently, a university-local collaboration mechanism should be established. This involves signing cooperation agreements with local public security, firefighting, medical, and emergency management departments to jointly build practical teaching bases, share professional teaching resources, and co-organize emergency drill activities, thereby fostering a work pattern characterized by "multi-party collaboration and resource sharing."

#### **3.4.2 Strengthen Resource Support to Consolidate the Development Foundation**

Increase financial investment in emergency safety culture dissemination and education by allocating special funds for practical base construction, equipment procurement, faculty training, and activity implementation. Integrate campus space resources to establish standardized emergency safety training facilities. Form a professional faculty team for emergency safety education by appointing public security officers, firefighters, and medical personnel as part-time external instructors. Simultaneously, enhance the professional training of on-campus counselors and student association advisors to improve their teaching capabilities in emergency safety.

#### **3.4.3 Improve Evaluation and Incentive Mechanisms to Stimulate Participation Enthusiasm**

Establish a scientific evaluation system for emergency safety culture dissemination and education. Set evaluation indicators covering aspects such as the content, format, effectiveness, and student satisfaction of the dissemination and education efforts. Employ diverse evaluation methods, including questionnaire surveys, practical assessments, and case analysis, to conduct regular evaluations of the dissemination and education work. Simultaneously, establish and improve incentive mechanisms to recognize and reward students, associations, advisors, and relevant departments who demonstrate outstanding performance in emergency safety culture dissemination and education. Incorporate the results of dissemination and education work into the performance assessments of relevant units and individuals, thereby fully mobilizing the enthusiasm and initiative of all stakeholders<sup>[6]</sup>.

## **4. Conclusion and Outlook**

From the perspective of risk society, emergency safety culture dissemination and education serve as a critical pathway for enhancing the safety literacy of youth groups, building a safe campus environment, and improving the societal public safety system. The quality of this education is of paramount importance in universities, which function as core platforms. Taking the practices of university emergency safety culture dissemination associations as the research sample, this paper, through empirical investigation and case analysis, identifies prominent dilemmas in current university emergency safety culture dissemination and education. These include content homogenization, singular dissemination mechanisms, superficial practical models, and an imperfect support system. To address these issues, optimization and enhancement are required across four dimensions: precise content construction, a diversified dissemination matrix, immersive practical design, and a systematic support system. Future research could further expand sample coverage, focus on the differentiated needs of various types of universities, and explore intelligent dissemination and education models by integrating emerging technologies. Furthermore, the long-term development of emergency safety culture dissemination and education necessitates synergistic efforts from multiple stakeholders-universities, government, society, and families-to collectively build a safety culture ecosystem with full participation. This will lay a solid foundation for constructing a safer China at a higher level.

### **Fund Projects**

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