Psychological Crisis Management in Universities in the New Era: Application and Effectiveness Assessment of the 4R Crisis Management Theory

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Abstract: This paper discusses the application of the 4R Crisis Management Theory in modern higher education, based on case analysis and research on psychological crisis intervention. This provides support for the theory that prevention is possible and that psychological crises can be intervened in - after starting as well as prevent occurrences in everyday life and that the perception of the mental health effects on students availed is correct. Through the systematic implementation of the 4R Crisis Management Theory, universities can construct a more complete, efficient and systematized mental health intervention framework to further improve campus safety and student psychological health. In addition, this paper puts forward multi-faceted and specific policy suggestions to enhance mental health education, build a psychological crisis early warning mechanism and intensify inter-departmental cooperation.

Keywords: University psychological crises, 4R Crisis Management Theory, Mental health interventions

1. Introduction

Any crisis among university students, whether individual or collective, involves a significant imbalance in the psychological state of an affected person and may exceed his/her capacity to cope. When these crises manifest and intensify, they have the potential to affect not only the individual in question but also others (parents, teachers and even society as a whole) [1].

1.1. Prevalence and severity of psychological crises in contemporary universities

Due to the intensifying social competition and accelerating pace of life, an increasing number of university students are facing mental health challenges, including extensive pressure, high anxiety, depression as well as substance abuse [2]. It arises from many aspects, such as changes in society, the gap between urban and rural areas [3], academic stress, difficulties in interpersonal relationships, emotional problems, improvements in social standards, etc. [4]

1.2. The importance of psychological crisis management in universities

There is no doubt about the importance of controlling psychological crises in university environments. These kinds of crises reveal students' behavioral, emotional and cognitive functions which lead to the deterioration in academic performance and trouble their daily life. Moreover, they harm the school atmosphere and social harmony [5]. It is important to think of more scientific interventions and management strategies for psychological crises in campus life [6]. Institutions should direct resources across the university to prevent, prepare and respond more effectively and to heal mental health in the long term, confrontational and crisis on campus [7].

1.3. Theoretical foundations and practical value of the 4R Crisis Management Theory

Steven Fink, a celebrated American crisis management expert, considers the evolutionary process of a crisis as a sort of natural cycle over time. A medical perspective groups the stages of a crisis into prodromal, acute, continuation, and resolution phases [8]. Based on this framework, the U.S. Federal Safety Management Committee method sought to segregate crisis management into four disparate steps, from a managerial standpoint: mitigation, prevention, response and recovery. The model was later developed and formalized into the 4R Crisis Management Theory: Reduction, Readiness, Response, and Recovery by crisis management expert Robert Heath in his book Crisis Management [9].

In higher education institutions, student counselors have an irreplaceable position as front-line staff in psychological crisis management. Concerns regarding the increasing frequency and seriousness of college student mental health problems have led to the implementation of mental health intervention programs. The 4R Crisis Management Theory is a substantiated theory that has proven to be extremely effective throughout RR with strategies applicable across the spectrum of psychological crises:

(1) Reduction: This phase focuses on mechanisms that help reduce the probability and severity of mental health crises.

(2) Readiness: This stage involves preparing detailed plans to ensure that the university can respond as quickly and effectively as possible with mental preparedness issues.

(3) Response: Psychological crisis means that once the occurrence, it is extremely urgent, so efficient and timely action is required in plant protection. The subsequent phase is then about acting on those response strategies; this involves comprehensive intervention and process-oriented support to as many individuals affected by the impact of the crisis, so that its effect may be mitigated.

(4) Recovery: This phase aims to provide long-term mental health interventions and support for those who have been affected to help them recover from a mental crisis.

2. Research significance

In today's university environments, the frequent occurrence of psychological crises poses significant challenges to student health and campus stability. This study aims to find practical solutions by testing the 4R Crisis Management Theory scientifically and tries to offer systematic management suggestions for psychological crises. To help the university establish more effective psychological intervention and crisis management mechanisms, to achieve further improvement of the student's mental health level. In addition to that, it also provides theoretical and practical support to college safety management.

Scientific research has proved that evidence-based practices for mental health interventions, including skill programs, screenings for mental illnesses and cognitive-behavioral therapy (CBT), work well. Consequently, it

is incumbent upon universities to develop and implement crisis intervention strategies for emotional health that are both widespread and knowledge-driven [10]. The 4R Crisis Management Theory The theoretical framework that meets this requirement is the framework of structured management as given by the 4R Crisis Management Theory. It implements the prevention possible, predicts potential crises, reacting to those and driving back for recovery after crises so that psychological crises will happen less.

3. Analysis of the application of the 4R Crisis Management Theory in university psychological crisis management

Drawing on the theoretical literature as well as on unstructured exploratory fieldwork in universities, the management of psychological crisis events in higher education might be strategically organized into three main phases, namely pre-crisis, during-crisis and post-crisis respectively. The toolkit is based on a multi-phase framework of crisis management, with measures for "Preparation" (including Reduction and Readiness but this booklet is focused mainly on Recovery) in advance or preparation phase, "Response" during the crisis, as well as "Recovery" after the crisis, with measures being different according to the phase.

3.1. Preparation

According to Heath (1998), a crisis management process should begin long before the crisis itself, with an effective early warning system in order to prevent and prepare staff and pupils to reduce their exposure to potential risks as well as to mitigate its impact [8]. This reframing of a state-based approach to university psychological crisis management provides important insight into the need for already extant infrastructure before a crisis, with greater emphasis being placed on the Reduction and Readiness areas. So, these two states are bundled under "Preparation" alternatively.

3.2. Response

When there is a crisis, Response management is the name of the game. This phase should concentrate on expediting and organizing crisis management to reduce the immediate implications of the crisis.

3.3. Recovery

Post-crisis Recovery focuses on the return to normal from a crisis and preventing future problems. What is at the heart of recovery management is therefore a comprehensive evaluation of an incident given time and then followed by support for those affected that is longer than currently generally provided.

The above analysis concludes that the 4R Crisis Management Theory of university psychological crisis management is used to mediate the negative effect of crises and plays a full role in promoting the overall safety construction on campus and improving students' psychological well-being.

4. Case study illustration: Applying the 4R Crisis Management Theory in university psychological crisis management

4.1. Case background

This case study focuses on a specific psychological crisis event that occurred at a university in Shenzhen City, Guangdong Province, China. The student's name is Koten (pseudonym), was under a lot of psychological

pressure from his graduation project and a series of clashes with roommates. The purpose of this report is to evaluate the impact of real-time psychological crisis management based on 4R Crisis Management Theory.

4.2. Event overview

On April 29, 2021, Xiao Tian attempted to engage in health-compromising behavior on the dormitory balcony due to accumulated psychological pressure. Fortunately, it was discovered in time. The University of Alabama utilized emergency responses surrounding the incident based on the 4R Crisis Management Theory before and after the event.

4.3. Preparation: Early warning and readiness

The fact that Xiao Tian had mental health problems was already recorded by his counselor two years before. The university would be able to monitor Xiao Tian's mental track status and allow early intervention (neuropsychological tracking would occur in a dynamic database of student information that the ZhiX platform could provide real-time records). This shows the Reduction and Readiness phases of the 4R Crisis Theory, where steps are taken to prevent crises by seeking out and offsetting potential psychological stress in advance.

4.4. Crisis handling: Rapid response

After Xiao Tian confronted a crisis, the pre-arranged psychological crisis emergency response protocol of the university immediately operated. It required coordinated action by Xiao Tian's academic department, the psychological health center, the security department, the student affairs office and the medical office. This was a reflection of the Response phase in the 4R Crisis Management Theory which encompasses rapid crisis control and management to prevent more serious consequences.

4.5. Post-crisis recovery: Long-term support and evaluation

The management of Xiao Tian's situation did not stop at the rapid reaction. The university supported him in the Recovery phase with continued psychological counseling and financial help and also went through an extensive debrief of how the situation was handled. This is the critical moment to contain the effects of this event on Xiao Tian and a larger scale for the well-being of our school, as well as to explore information worth optimizing follow-up crisis management.

5. Effectiveness evaluation and innovative highlights

5.1. Preparation phase: Reduction and readiness management

The preparation phase includes Reduction and Readiness Management, within the 4R Crisis Management Theory. Reduction Management: Reduction management reduces the incidence and severity of psychological crises by increasing the capacity for coping with psychological stress and guidance among faculty, students and other parties in a research setting. This is done through a series of means, including regular mental health lectures and training to make sure that the faculty are equipped and educated enough to detect possible conditions within students. Ways Readiness Management work is that Readiness Management builds a normal psychological crisis early warning system, to keep the student file database up-to-date. It takes advantage of real-time monitoring systems and data analytics that are sensitive to the early signs of crises.
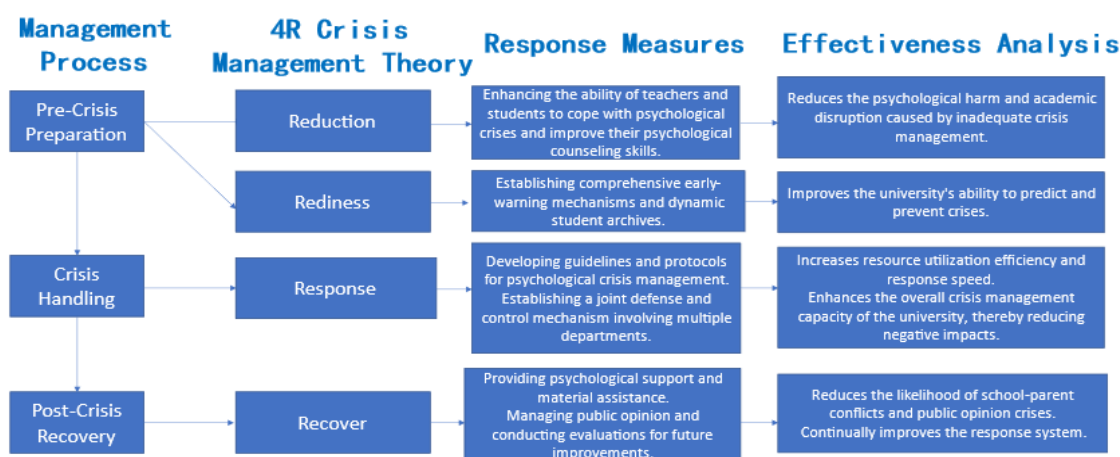
Figure 1. 4R Crisis Management Theory in university psychological crisis management.

5.1.1. Case analysis

Then comes the case from a university in Shenzhen, where the student Xiao Tian found himself beleaguered by employee fire at his graduation project and a dispute with a roommate. Thanks to the counselor, a dynamic student database and a real-time psychology health monitoring system, Xiao Tian's mental state was under the watch by the minute. This ensured psychosocial crises were addressed early. Measures taken include a 24-hour hotline for psychological consultation, education about mental health, and regular mental check-ups. Everything has improved Xiao Tian's effective stress management, and early detection and intervention before the crisis is too late.

5.1.2. Effectiveness analysis

In Xiao Tian's case, the preparatory measures let them catch his psychological stress early and no disaster occurred. It is from the success of those measures, that the study can emphasize the importance of effective education in science and mental health and an early warning network on the level needed to prevent a psychological crisis. This reduces both the frequency and magnitude of such events by orders of magnitude. There is evidence to suggest that mental health education can provide a foundation of support that enables individuals to cope more effectively with crises and their consequences, in turn potentially increasing adaptive capacity, which is the ability to successfully manage change and thereby reduce maladaptive outcomes [11]. In the same vein, efficient early warning systems and other dynamic information management to forecast and manage crises will lessen their incidence by universities and intensity.

5.2. Crisis response phase: Response management

The Response Management category sets forth operational mechanisms and protocols to address instances of emotional crises. There is an all-branch collaborative mechanism at the University level, which intertwines various functional departments such as the psychological health center, student affairs office, security department and medical office. At this stage, the most important goal is to quickly detect and cope with critical events, using pre-set procedures [12]. In this case, the medical office provides emergency medical support, the psychological health center provides immediate psychological interventions, security guarantees on-site safety and order, and student affairs collects necessary resources in facilitating the process.

5.2.1. Case analysis

After the crisis of Xiao Tian, the university immediately launched its pre-prepared psychological crisis emergency plan. The security bureaus quickly jumped to deal with the scene, the medical center provided first aid, the psychological center issued a manual for students to use psychological counseling services, became the academic department, and all aspects of the student affairs office are regarded as called parents and coordination. This rapid response was successful in managing the situation and prevented any larger, serious damage from happening.

5.2.2. Effectiveness analysis

Thanks to the Response Management stage conducted efficiently, the university not only managed to stabilize itself after the crisis but also provided medical and psychological support on time while minimizing negative outcomes for other students. This tight cross-department cooperation helps optimize resource utilization and response time, and overall improve its crisis management capability. One report has shown that universities with good systems for responding to crises and coordinating emergency responses can contain situations quicker and minimize the potential harm in psychological crisis scenarios [13].

5.3. Post-crisis recovery phase: Recovery management

The recovery management stage aims to get things back to normal in terms of normal academic and social activities by giving out aids and launching public relations campaigns, timely reviewing the event response. Relief measures comprise psychological counseling and relief materials for the students affected families and the need to support them to bring back to normal life. Public relations work to manage public and media relations, securing advancements in the reputation of the institution.

5.3.1. Case analysis

The university gave Xiao Tian ongoing counseling and financial support following the incident, helping both him and his family get through the terrible episode. In addition, the set worked with law enforcement to monitor online public sentiment and quickly leaked details of the event's progress to stem rumors, keeping bad news from snowballing. It also reviewed in detail the event handling process and experience and formulated improvement plans for the subsequent crisis management.

5.3.2. Effectiveness analysis

The excellent post-crisis recovery measures well-speeded up and enhanced the quality of Xiao Tian's rehabilitation, avoiding long-term mental damage. Its police handling of the incident and management of public sentiment during this sparked another question I always ask: How did parents and the public continue to trust that institution? Summing it up and reflecting on the event the university has upgraded its crisis management protocol, making it more suitable to deal with possible future psychological crises.

6. Policy recommendations and future research directions

6.1. Policy recommendations

6.1.1. Enhance psychological crisis early warning and dynamic student management

Strengthen psychological crisis early warning systems, and dynamic student management by universities.

Instead, the institutions can develop and employ big data analytics-based platforms for the monitoring of mental health, therefore keeping track of the mental statuses of students in real-time and detecting behavioral changes well before they spark psychological crises. The establishment and improvement of a dynamic student database are done which can record the mental health history, academic performance, and interpersonal relationship status of students, which can make the information management more comprehensive and scientific before and during the crisis [14].

6.1.2. Provide mental health education and training for faculty and students

Regular mental health education and crisis response training should be provided to faculty and students to enable them to identify and respond to psychological emergencies. Furthermore, the training content must address mental health knowledge and crisis intervention to enhance the psychological resilience and coping abilities of teachers and students.

6.1.3. Establish cross-departmental coordination and cooperation mechanisms

At the university level, it would be beneficial to build upon this progress by creating and streamlining processes for collaboration between entities such as the psychological health center, student affairs office, security office and medical office. This way quick communication and action could be done in the case of a psychological crisis. Departments need to clarify their functions, practice emergency drills, and improve their ability to respond collaboratively. The ability to manage crises consistently and efficiently is paramount with any business [2] and substantial cross-departmental communication improvements can lead to a significant degree of resource savings and speed of response, thus increasing the overall capacity to carry out effective crisis management throughout the institution.

6.1.4. Strengthen public sentiment management and post-crisis recovery

After a psychological crisis, universities should also focus on public opinion control and follow-up recovery work. Public opinion management, as explained above, is therefore crucial to garner public trust and home-school communication must be close. In hindsight, a complete analysis can be helpful after resolving the incident to improve crisis management measures in the future. Effective management of public sentiment and recovery efforts can mitigate negative impacts and foster the health recovery of affected individuals.

6.2. Future research directions
6.2.1. Optimization of psychological crisis management models

The development of a more finely grained 4R Crisis Management Theory, and its possible relevance and utility to psychological crises in different cultural contexts, as well as in educational systems should be addressed in future research. There is a need for comparative studies to determine the psychological crisis management models of other universities in China and improve their mechanisms.

6.2.2. Application of digital technology in mental health monitoring

The application and development of artificial intelligence (AI) and big data hold significant potential for advancing intelligent and refined education in higher education institutions. Applying AI and big data to the practice of psychological health education for university students can play a highly positive role in accurately identifying and scientifically addressing mental health issues among this population [15]. Further research may

focus on the construction and utilization of mental health monitoring systems based on artificial intelligence and big data analytics, in order to analyze their effectiveness and possibility to predict psychological crises.

6.2.3. Multidisciplinary cooperative research

Psychological crisis management intersects between psychology, sociology, education, medicine and other disciplines. Future researchers should deepen multidisciplinary cooperation and carry out comprehensive research on the etiology, intervention, and prevention of psychological crises from different perspectives. This will be beneficial for their scientific and comprehensive management plans from both theoretical and empirical perspectives.

Disclosure statement

The author declares no conflict of interest.

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