



Assessment the effectiveness of central crisis management at Charles University during the 2023 active shooter incident: a thematic analysis

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Abstract

This study provides a comprehensive analysis of the Central Crisis Management Team's response at Charles University during the active shooter incident on December 21, 2023. Utilizing a qualitative and comparative methodological approach, this research systematically examines official records, meeting minutes, and interviews with key stakeholders to assess the effectiveness of crisis management practices. Thematic analysis was employed to identify and categorize the crisis management strategies into phases as outlined by the Czech Ministry of the Interior's guidelines for handling soft target incidents (Ministry of the Interior, 2016). The findings reveal significant alignment with prescribed protocols during the initial response phase and identify an opportunity to expand the protocols to encompass additional thematic areas as the situation progressed. Building on these findings, the study concludes with actionable recommendations aimed at improving communication systems, integrating psychological support, and enhancing crisis preparedness at educational institutions. These recommendations, detailed in the Conclusion, offer a framework for strengthening security protocols and response strategies in academic settings.

Keywords Crisis management · Soft targets · Active shooter · Post-crisis recovery · Crisis response framework

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Introduction

On December 21, 2023, Charles University in Prague faced a harrowing challenge when a shooter attacked the main building of its Faculty of Arts, leaving 14 people dead and dozens more injured. This unprecedented event not only sent shockwaves through the Czech Republic but also put the university's crisis management capabilities to a severe test. Within an hour of the attack, the University activated its Central Crisis Management Team, initiating a coordinated response based on established crisis management tools.

This paper examines the thematic areas addressed by the Central Crisis Management Team at Charles University (CCMT) in the wake of the shooting. In this study, thematic areas refer to key categories of crisis response activities, identified through thematic analysis of official records, meeting minutes, and stakeholder interviews. These areas encompass specific procedural and decision-making aspects of crisis management and serve as an analytical framework for evaluating the university's response in comparison with national guidelines.

Since this study also evaluates how the university's response aligns with national crisis management guidelines, the identified thematic areas were compared with those structured and defined by the Czech Ministry of the Interior for the so-called soft targets (2016), where soft targets are defined by the Ministry as locations that are inherently vulnerable due to limited physical security measures and high public accessibility. Typical examples include schools, shopping centers, cultural and sporting venues, religious sites, and other areas with a high concentration of people where security infrastructure is insufficient to effectively respond to a severe physical incident. This comparative approach allows for a clear assessment of both procedural adherence and deviations, ensuring that broader patterns of crisis response are captured.

While the Ministry's framework defines four time-bound crisis management phases, each encompassing specific thematic areas for managing the crisis during the first hours and days after the incident, the thematic analysis of the CCMT identified additional areas beyond the immediate response, such as long-term psychological support, building reconstruction, distribution of personal belongings left in the evacuated building, and the organization of memorial events. Based on these findings, we propose extending the Ministry's four-phase framework to a six-phase model. This expansion refines the vaguely defined Phase 4 ("later") by distinguishing two additional phases (Phase 5 and Phase 6), which account for structured long-term recovery efforts, including post-crisis coordination, victim and community support, and institutional resilience-building. This revised model is detailed in the following section.

The significance of this analysis lies in its potential to provide insights into effective crisis management practices, especially in handling incidents at soft target locations such as educational institutions. Furthermore, it offers a critical assessment of the preparedness and responsiveness of institutional crisis management teams when faced with real-world emergencies. By comparing the University's crisis management activities with the recommended methodology, this paper



aims to contribute to the broader discourse on enhancing security protocols and crisis response strategies in academic settings and beyond.

The aim of the study is to analyze and assess the responses of the Central Crisis Management Team of Charles University to the shooter attack in December 2023. The main research questions we seek to answer are:

1. What thematic areas of crisis management were addressed by the Central Crisis Management Team, and how do these areas correspond to the phases of crisis management according to the methodology of the Czech Ministry of the Interior for coordinating responses to incidents involving soft targets?
2. To what extent were the thematic areas in line with the Ministry's recommendations for effective crisis management, and how realistically does this methodology address the needs arising in real crisis situations?

From these questions, the following hypothesis arise:

Hypothesis 1 *The Central Crisis Management Team addressed thematic areas that aligned with the crisis management guidelines defined by the Czech Ministry of the Interior, indicating adequate preparedness and an effective response to the crisis situation according to the Ministry's standards.*

Hypothesis 2 *In addition to addressing thematic areas covered by the Ministry's guidelines, the Central Crisis Management Team also addressed areas beyond these pre-defined categories, indicating the need for expanding and refining crisis management frameworks for academic institutions.*

Literature review and related works

Crisis management has become a critical focus for public administration, local governments, and critical infrastructure operators, leading to the development of comprehensive guidelines and methodologies. Among these, the Czech Crisis Act (Act No. 240/2000 Coll.) provides a foundational framework for organizing crisis management in the Czech Republic. This legislation emphasizes preparedness, response, and recovery phases, focusing particularly on public authorities and critical infrastructure. Comparable frameworks exist internationally, such as Germany's *Zivilschutz- und Katastrophenhilfegesetz (ZSKG)*, France's *Code de la sécurité intérieure*, and the United Kingdom's *Civil Contingencies Act 2004*. These frameworks share a structured approach to crisis management but vary in their adaptation to specific national contexts.

In the context of soft targets, the *Basics of Soft Target Protection Guidelines (Základy ochrany měkkých cílů)* by Kalvach (2016) and the *Methodology for Soft Target Coordination for the Phase After a Security Incident (Metodika koordinace měkkého cíle pro fázi po bezpečnostním incidentu)* by Ben David (2024) provide



critical insights. Kalvach emphasizes pro-active measures, including enhancing security awareness, involving local personnel in prevention and mitigation efforts, and preparing situationally adaptive response plans. Ben David's methodology complements this by focusing on post-incident coordination, stressing the importance of clear communication, resource prioritization, and role delineation to minimize harm after an incident.

From an organizational perspective, Bhaduri (2019) explores the interplay between leadership styles and crisis phases, advocating for adaptive leadership to foster resilience. He identifies how transformational and cognitive leadership styles align with different stages of crisis management, such as prevention, containment, and recovery. Jahantigh et al. (2018) take a quantitative approach, proposing a crisis management model based on Fuzzy Cognitive Maps (FCMs). Their methodology identifies causal relationships between crisis criteria and offers a data-driven framework for prioritizing actions across pre-crisis, crisis, and post-crisis phases. Both studies highlight the critical role of preparedness, communication, and adaptability in effective crisis management.

Despite the substantial body of research on crisis management, studies focused on academic institutions, particularly as soft targets, remain limited. Existing literature predominantly addresses public institutions or critical infrastructure, leaving significant gaps in understanding how academic environments can tailor crisis management strategies to their specific vulnerabilities. This gap is particularly relevant given the unique challenges academic institutions face, such as their open nature and the high concentration of people.

This study builds on the existing literature by examining the Central Crisis Management Team's response to the 2023 active shooter incident at Charles University. It analyzes how the team's actions aligned with the existing methodologies while identifying areas for improvement. By bridging theoretical frameworks with practical applications, this research provides actionable insights to advance crisis management strategies in academic settings. It underscores the need for adaptive and context-specific approaches, contributing to both policy development and practical implementation.

Methodology

This study examines the response of the Central Crisis Management Team at Charles University to the active shooter incident on December 21, 2023, by employing a qualitative and comparative methodological approach. The analysis focuses on identifying key thematic areas addressed by the team and, most importantly, evaluating how the team's real-world actions and decisions diverged from the guidelines outlined in the Czech Ministry of the Interior's methodology for managing crises at soft targets. These real-life deviations provide valuable insights that can significantly enhance and refine the Ministry's existing framework.

The data for this study were collected from multiple sources, including official records, such as meeting minutes, communications with stakeholders, and public statements issued by the university. Additionally, semi-structured interviews were



conducted with members of the crisis management team and other key stakeholders to provide deeper insights and context for the analysis.

The collected data were analyzed through thematic analysis (Clarke and Braun 2016), allowing for the identification of key aspects of the university’s crisis response. The analysis was conducted inductively, meaning that themes were derived directly from the data rather than being pre-defined. A broad range of activities and decisions undertaken by the Central Crisis Management Team (CCMT) were captured and grouped into broader thematic areas, which were compared against the structured crisis management priorities and tasks outlined by the Czech Ministry of the Interior (2016). While most thematic areas aligned with the Ministry’s pre-defined phases, additional areas emerged that extended beyond this framework, including media relations, long-term psychological support, and handling victims’ belongings. Although these aspects are not explicitly covered in the Ministry’s methodology, they played a critical role in the university’s response and were retained in the analysis to reflect the full scope of crisis management in an academic setting.

A comparative analysis was subsequently performed to evaluate how well the team’s actions aligned with the Ministry’s guidelines, and deviations were identified to highlight potential areas for improvement (Table 1).

The Ministry’s methodology was integrated as the primary framework for this study. The key phases and their priorities were translated and synthesized into actionable thematic areas to ensure their applicability to the context of Charles University and the work of the Central Crisis Management Team. This framework provided a consistent reference point for the analysis and was crucial for understanding the dynamics of the crisis response.

Table 1 Timeline of priorities according to Czech Ministry of Interior guideline

	Phase 1	Phase 2	Phase 3	Phase 4
Time	0–15 min	15 min–3 h	3–6 h	Later (6+ hrs.)
Priorities	Response on effected site Alerting first responders (112) First Aid	Coordination with first responders on site Protection of other activities Adopting measures within Coordination Plan	Stabilization of Coordination Team Keeping record of injuries Updating information	Deciding on what will happen tomorrow Refreshing Coordination Team Effective communication
Tasks	Isolation of incident Help to victims on site Activation of Coordination Plan	Cooperation with first responders on site Collecting information Supply information internally Securing other locations	Regular internal briefings Improving accuracy of information	Psychological support Rotation of Coordination Team members



For clarity, the study methodology can be summarized in Table 2:

Results

The results of this study provide a structured analysis of the response by Charles University's Central Crisis Management Team (CCMT) during the active shooter incident on December 21, 2023. Building on the thematic analysis outlined in the Methodology, the findings categorize the crisis response into distinct thematic areas and assess their alignment with the four-phase crisis management framework defined by the Czech Ministry of the Interior. In line with the research questions, this section examines the extent to which the CCMT's actions followed the Ministry's guidelines and identifies additional crisis management activities that emerged as necessary but were not explicitly covered in the official methodology. By doing so, the findings contribute to a broader understanding of crisis response in academic settings, highlighting both areas of consistency with established crisis management frameworks and opportunities for refinement. These insights form the basis for the discussion and recommendations aimed at improving crisis preparedness and response strategies in universities and other soft target environments.

Phase 1: immediate response phase (0–15 min)

Summary The immediate response phase is critical, because professional first responders are not yet present at the incident site, leaving the initial actions entirely to those on the scene. At Charles University, defining the exact endpoint of this phase is challenging, as police officers arrived in stages. The first police unit entered the building within 7 min of the first emergency call at 14:59, and the perpetrator took his own life after 22 min. During this period, police progressively took control of different floors, ultimately forcing the attacker onto the rooftop. For analytical purposes, we approximate the end of Phase 1 at around 10 min, as this is the estimated point when the attacker began retreating, and multiple officers were already inside the building. Until that moment, the response relied entirely on improvised, community-driven actions by students, staff, and faculty leadership. These efforts addressed immediate priorities, such as lockdowns and

Table 2 Study methodology structure

Step	Action
Data collection	Compilation of official records, interviews, and stakeholder inputs
Thematic analysis	Inductive coding of crisis response activities, categorization into thematic areas, and comparison with the Ministry's framework
Comparative analysis	Evaluation of thematic areas against the Ministry's guidelines, identifying areas of alignment and divergence
Synthesis and evaluation	Identification of deviations and recommendations for improvement



evacuations, but also highlighted gaps in institutional preparedness, particularly the absence of training and a public warning system to guide coordinated action.

Timeline

14:58	First shot fired by the perpetrator
14:59	Emergency services notified via 158 national emergency hotline
15:05	First policemen arrive on-site
15:15	Faculty secretary issues an email advising lockdown/evacuation
15:20	Attacker neutralized (suicide); police take control of the site

Details The incident began at 14:58 when the perpetrator fired the first shot. At 14:59, the first report was received by police via the emergency line 158, and police units arrived on-site at 15:05. By 15:20, the perpetrator was found deceased, having taken his own life. Witness accounts describe spontaneous lockdowns, evacuations, and information-sharing among students, staff, and their families through personal messages, mass emails, social media, and media outlets. A significant limitation was the absence of a state emergency warning system, which was only set to become operational in January 2024. The faculty also lacked its own warning system for such incidents.

Faculty leadership improvised responses during this phase. At 15:04, the faculty secretary contacted the emergency line, seeking instructions but received no specific guidance due to limited situational information. She subsequently drafted and sent an email at 15:15 advising employees to either lock down or evacuate based on her judgment. The immediate response relied heavily on individual decisions, with some senior employees coordinating lockdowns from within the building and ensuring that colleagues followed emailed instructions to stay locked away from doors.

Spontaneous evacuations occurred alongside lockdowns, with police later directing evacuees through the main entrance. However, this inadvertently led some individuals toward the shooter's position on the building's balcony. Witnesses also reported that spontaneous first aid was provided before police ordered full evacuation.

Additional directive actions were undertaken by faculty leadership, including warnings issued from a makeshift proto-crisis center within the locked-down faculty, coordination of information dissemination, and cancelation of afternoon classes. For instance, an employee unaware of the ongoing shooting called the faculty secretariat at 15:29, where leadership informed them of the incident.

Key differences and observations

- Compared to the Ministry's guidelines, which prioritize isolating the site, notifying emergency services, and providing first aid within the first 15 min, this phase at Charles University exhibited several unique responses:
 - Spontaneous creation of a proto-crisis center.
 - Establishment of a WhatsApp group for coordination between leadership and police.



- Designation of a contact person to assist first responders. At 15:23, the vice dean successfully integrated a police representative into the internal WhatsApp group to share real-time updates from within the building.
- The response phase lasted 22 min, with police arriving exceptionally quickly—approximately 7 min after the first emergency call. This rapid response significantly shortened the duration during which the building’s occupants had to act independently without professional assistance. Despite the swift police arrival, the complexity and size of the building extended the time required to secure all areas, resulting in the 22 min total duration until the threat was neutralized. This remains within a reasonable deviation from the 15 min benchmark set by the methodology.
- Warning and coordination efforts during the initial moments were entirely spontaneous, relying on individual judgment and ad hoc collective actions. The lack of a public address system meant that there was no centralized way to issue immediate warnings or guidance.
- Crisis communication and response developed unevenly—while many individuals acted independently without a structured plan, some staff members took initiative to spread warnings through available channels, and a makeshift crisis coordination center was improvised in the dean’s office. This mix of isolated reactions and emerging coordination efforts highlights not only adaptive responses and systemic weaknesses in institutional preparedness but also the remarkable ability of unprepared individuals to improvise coordination and develop community-based warning mechanisms in real time.
- Directive leadership actions filled critical gaps, underscoring the importance of empowered decision-making during crises. The absence of a specific crisis plan left faculty leadership without clear guidelines, requiring them to rely on their own judgment and improvisation to coordinate lockdowns, disseminate information, and manage the immediate response.
- According to witness accounts, the attack was remarkably quiet, with no audible signals indicating an ongoing shooting. As a result, most people in the building moved calmly and without awareness of the extensive gunfire occurring on the fourth floor, further delaying the recognition of danger and reaction to the threat.

Phase 2: initial coordination and risk assessment phase (15 min–3 h)

Summary This phase involves coordination with first responders, securing activities, and implementing crisis plans. At Charles University, the phase saw a spontaneous meeting of faculty leadership at a nearby restaurant to address the situation intuitively, as no formal crisis plan was available to guide their actions. Meanwhile, the central crisis management team of the university was convened and established communication with police leadership, beginning efforts to coordinate university-wide activities.

Timeline



15:20	Police secured the site
15:45	Faculty leadership regrouped at a nearby restaurant to establish their crisis team (faculty level)
16:00	Central (university level) crisis management team convened but operates intermittently

Details This phase began at 15:20 when police secured the site. Faculty leadership, initially operating from a lockdown, began coordinating activities, such as canceling classes and informing employees. Upon evacuation, they regrouped at a nearby restaurant to establish a faculty crisis management team, focusing on gathering situational information and communicating with staff. Among the first actions was assessing the risk to other university buildings, as the movement of the attacker and the potential for further threats, such as explosions, were unclear.

Based on interviews with university staff, spontaneous reactions occurred at various faculties across the university, which comprises 17 faculties in total. These included actions, such as closing or evacuating buildings. However, these measures were uncoordinated, as there were no pre-defined communication channels between the central crisis management team and individual faculties. The central crisis management team of the university was officially convened at 16:00 but operated intermittently during the initial hours and lacked preparedness to manage communication and coordination with other faculties effectively.

Comparatively, the Ministry's guidelines emphasize swift coordination and continuous operations during this phase. The absence of pre-defined communication channels and dedicated security roles within the faculties hindered efficient coordination.

Key differences and observations

- The faculty's response to the severe attack was guided by intuitive decision-making and natural leadership rather than relying on pre-established protocols for crisis management or preparedness for violent incidents. While such protocols are not legally required, the situation highlighted the reliance on spontaneous actions and the adaptability of faculty leadership in the absence of formalized procedures.
- The university had no established communication or coordination framework among its 17 faculties and 4 institutes. As a result, responses and security measures by the leadership of other faculty and the university (rectorate) were uncoordinated and varied.
- Collaboration with the police was not established at a level that would allow for swift clarification of the situation, assessment of ongoing risks, and anticipation of developments requiring university preparation.



Phase 3: crisis team stabilization and situation clarification phase (3–6 h)

Summary This phase focuses on the stabilization and establishment of the university Central Crisis Management Team’s functionality, addressing immediate post-incident priorities, and laying the groundwork for longer-term recovery. At Charles University, this phase was marked by the initiation of structured central crisis management activities, including coordination with external stakeholders, clarification of events, and addressing the immediate needs of students, staff, and victims’ families.

Despite efforts toward centralization, uncertainties persisted due to imprecise crisis plans, which lacked clear guidance for action. As a result, key elements, such as procedures, agendas, competencies, and contact networks, had to be developed and defined mostly from scratch.

Initially, the crisis management team deliberated whether to convene at fixed intervals as a formal meeting or operate as a continuously present working group. Over time, it evolved into a permanently present and actively functioning team, reflecting the demands of the situation and the need for ongoing, real-time coordination.

Timeline

17:00	First official meeting of the central crisis team
22:00	Continuous meetings transition into a working group format
Early morning, Dec 22	Faculty leadership and central team integrate efforts

Thematic areas addressed by the crisis team:

1. Operational coordination

- The crisis team formally began structured operations at 17:00 with its first official meeting, transitioning from ad hoc responses to a coordinated approach.
- Coordinated with police and external agencies to ensure secure and controlled access to the site, including verifying whether any ongoing threats remained.
- Clarification of events: Efforts were made to gather accurate information about what happened at the Faculty of Arts and the Celetná building, including the scope of police evacuations and concerns about potential explosives.

2. Information management

- Accounting for victims and injuries: Compiling preliminary data remained a challenge, as police withheld details until identification was confirmed and later cited GDPR regulations for not sharing information. Consequently, all data came from students, staff, relatives, or media sources.
- Compiled preliminary lists of victims using unofficial reports from students and staff, balancing transparency with the need for verification.
- Drafted consistent messaging for media outlets and internal communications to manage the flow of information effectively.



- Established a publicly accessible hotline to facilitate communication with students, staff, and parents.

3. Victim support

- Established initial plans for psychological support for students, staff, and families, ensuring the presence of crisis intervention specialists.
- Created a donation fund to provide financial assistance to those affected.
- Addressed immediate actions impacting the university community, including the cancelation of all events involving more than 25 attendees for security reasons.

Key differences and observations:

- The absence of a comprehensive crisis plan led to an improvised response, particularly in the initiation of the operational crisis management team. Despite this, the university's crisis management team demonstrated exceptional proactivity, addressing situations that neither state nor municipal authorities were prepared to handle, such as establishing the crisis management center and launching an information hotline. Within the early hours, the university crisis team began handling sensitive matters, including the placement of candles and the organization of a memorial site, as well as initiating discussions on the establishment of an endowment fund to support victims and their families.
- The integration of multiple crisis teams (faculty team and university team) demonstrated adaptability but also highlighted the need for pre-defined collaboration frameworks to streamline efforts and prevent task duplication or conflicts in decision-making.
- Delays in obtaining victim information from police authorities created challenges in balancing timely support with the need for accuracy. This limitation hindered the university's ability to communicate effectively with victims' families and the public.
- The transition from ad hoc responses to structured operations underscored the importance of scalable crisis management plans tailored to large-scale incidents, emphasizing the need for clear guidelines on agenda-setting, role definition, and resource allocation in high-pressure scenarios.

Phase 4: immediate recovery phase (6+ h)

Summary This phase revealed the complexity of addressing the emotional, logistical, and operational impacts of the incident. Challenges included establishing effective communication with victims' families, coordinating the distribution of items left during evacuation, and assessing the impacts on the university as well as the building functionality. By the early hours of December 22, the crisis management team's operations evolved into a permanent structure. Members held designated briefings to coordinate ongoing activities and address emerging issues.

Timeline



Dec 21, night Organizing the cleaning and physical security team to protect the Faculty of Arts building

Dec 22, 12:15 First University team building inspection (still under the police protection)

Thematic areas addressed by the crisis team

1. Initial building inspection and damage assessment

- The first building inspection began at 12:15, assessing structural damage and determining timelines for operational restoration.
- By 13:00, after the police officially handed over the building, deeper inspections revealed over 190 broken doors, bullet-riddled walls, and flooding caused by broken heating pipes.

2. Cleaning operation

- At 7:00, the crisis management team arranged for a cleaning company to discreetly address biological waste and structural damage. Selected companies were ready to enter the building once police allow.
- Specialized teams handled hazardous materials and debris, while additional efforts were needed to clear larger items like broken doors and shattered windows.

3. Security measures and controlled access

- A security team was deployed at 13:00 to regulate access to the building, ensuring safety and preventing unauthorized entry. Their protocols were developed and drafted on last moment with critical need of flexibility and need for discretion.
- Security personnel also managed the emerging spontaneous memorial gathering outside the building, coordinating with law enforcement, municipality and university leadership.

4. Managing inquiries from families

- The publicly announced hotline received a high volume of emotionally charged calls, particularly from parents seeking information about their children.
- Parents of victims as well as diplomatic services also inquired about retrieving personal belongings and accessing support services.

5. Planning and organizing personal items' retrieval

- The crisis team developed a system to document and retrieve belongings left behind during the evacuation.
- A collaboration with the Czech Red Cross facilitated cataloging and transportation of personal items to an alternate location for controlled distribution.
- Special attention was required for handling damaged or contaminated items, including personal effects that had been exposed to blood or structural debris.



6. Establishing a central crisis management team and faculty integration

- The Faculty of Arts crisis team formally joined the central crisis team, enhancing coordination and enabling a unified response across the university.
- The crisis management team began operating in a more structured manner, implementing clearer documentation processes and scheduled meetings to streamline decision-making.
- Key priorities included:
 - Narrowing down and verifying the official list of victims.
 - Coordinating psychological support services for affected individuals.
 - Excluding deceased individuals from university IT systems to prevent automated notifications.

7. Memorial arrangements and media management

- The crisis team negotiated with municipal authorities to delineate space for the growing memorial near the Faculty of Arts.
- Ensuring respectful management of public tributes while balancing logistical challenges.
- Initial commemorative events included a mass and a candle-laying ceremony, attended by politicians, academics, and the public.
- University leadership coordinated with religious and civic organizations to facilitate community mourning.

8. Managing media inquiries and public communication

- The crisis team prepared responses regarding the attack, its aftermath, and the university's security measures.
- Emphasis was placed on balancing transparency with respect for victims and their families.
- Drafting of initial public statements and updates ensured that students, staff, and the broader community received timely and coordinated communication regarding the university's response to the incident.

Key differences and observations

- The absence of recovery protocols led to ad hoc solutions, particularly in managing personal belongings and establishing communication with victims' families.
- It took 36 h for the crisis team to rotate leadership and refresh personnel, highlighting the need for sustainable staffing plans.
- While external stakeholders, such as the Czech Red Cross, private security, or cleaning services, were mobilized effectively, the process required significant effort due to the lack of pre-established agreements.
- The distribution of personal belongings and interactions with victims' families underscored the emotional toll of the recovery process, emphasizing the importance of psychological support and empathetic communication.



- The extensive damage to the Faculty of Arts building posed logistical challenges, delaying its return to regular operations and necessitating a coordinated approach to repairs and cleaning.

Phase 5: building handover and first commemoration phase

Summary This phase extended beyond the ministerial methodology, reflecting the scale and complexity of the attack's aftermath. Beginning on the afternoon of December 22, 2023, when the police handed over the building and the crisis team prioritized the organization and distribution of personal belongings, provision of psychological support, and management of communication with victims' families, the public, and the media. Additionally, significant efforts were dedicated to organizing commemorative activities, including the establishment of a memorial site near the Faculty of Arts and the coordination of candlelight vigils. These events required careful logistical planning to balance public participation with respect for the victims and their families.

While this phase encompassed multiple thematic areas, its defining characteristic was the set of activities associated with regaining control of the building, distinguishing it from the previous phases. The transition from a crime scene to a functional space required structured coordination between university leadership, facility management, and external service providers. To provide a clearer conceptual distinction, this phase concludes with the night following the first day of building handover, serving as a bridge to Phase 6, which focuses on long-term recovery and institutional adaptation.

Timeline

Dec 22, 13:00	Faculty building handed over to Charles University by the police University started cleaning of the building and set a private security to protect the building
Dec 22, 14:30	All victims officially identified by the police (however, names were not shared with the university)
Dec 22, Afternoon	Organization of personal belongings left in the building begins
Dec 22, Evening	Media engagement at distribution site

Thematic areas addressed by the crisis team

1. Handling communication with victims' families:
 - At 14:30 on December 22, the crisis team received confirmation from the police that all victims had been identified and families informed. However, the university faced legal and procedural barriers in directly contacting the families. The rector and the dean of the Faculty of Arts sought to offer condolences and support but lacked access to contact information.
 - The university attempted various strategies to establish communication, including engaging with families indirectly through colleagues and students.



By 17:30, the absence of direct communication led to public criticism accusing the university of withholding information about the victims.

2. Psychological support and communication:

- Psychological care emerged as a critical priority, with interventionists from the Czech Police and other entities increasing their presence at distribution sites.
- The crisis team's psychological aid coordinator collaborated with multiple organizations to deliver diverse forms of support, including peer-to-peer programs initiated by students at the Faculty of Philosophy.
- Communication with victims' families presented significant challenges. Legal restrictions prevented the university from accessing official victim lists, and cultural norms around privacy further complicated outreach. Families were eventually contacted indirectly through colleagues, classmates, and relatives.
- The crisis team also considered issuing a public call for families to contact the university but ultimately relied on informal channels to establish contact.

3. Coordination of the crisis center:

- The crisis center's operations stabilized, with clearer documentation processes and structured briefings.
- Key agendas included maintaining the university's hotline, managing media inquiries, and planning for the Christmas holiday period.
- Efforts were made to prevent burnout among crisis team members. Catering services were arranged to support the endurance of volunteers and staff involved in prolonged operations.

Key observations and challenges

- The process of cataloging and transporting personal belongings, particularly those of victims, underscored the intricate demands of recovery operations. The absence of pre-defined protocols required the crisis team to develop solutions on the spot, exposing the need for structured logistical plans for similar future events.
- The emotionally charged nature of the phase demanded exceptional psychological care and empathy. Interactions with victims' families, students, and staff required a sensitive approach, highlighting the importance of comprehensive psychological support as a core component of crisis management.
- Managing intense media interest while respecting the privacy of victims and their families proved challenging. The collaboration between the press team and psychological aid coordinator was instrumental in maintaining consistent and respectful messaging, balancing transparency with sensitivity.
- The crisis team faced overwhelming pressure to address situations as they arose, often without clear protocols or pre-defined responsibilities. Key decisions—such as securing the building after police handover, organizing cleaning and distribution of personal belongings, and arranging memorial events—were made spontaneously based on the initiative and judgment of team members.



- The magnitude of the agenda, combined with the lack of preparation, stretched the crisis team's capacity to its limits. Reinforcements were necessary across all levels, not only to manage operations but also to ensure the well-being of team members working under immense stress. This highlighted the importance of scalable crisis management frameworks and adequate resource allocation for prolonged recovery phases.

Phase 6: strategic recovery and long-term planning phase

Summary In the aftermath of the attack, the focus shifted to resuming academic activities, rebuilding the affected facilities, and establishing long-term security measures. Key milestones included a live press conference on January 4, 2024, which consolidated the university's response strategy and set the direction for future security planning. Memorial activities, facility reconstruction, and easing academic pressures were prioritized alongside addressing financial and emotional needs. Specific agenda points included the organization of commemorative events, adjustments to academic schedules and deadlines, communication with victims' families and students, financial planning through the establishment of an endowment fund, and the definition and implementation of comprehensive long-term security measures.

Timeline

Dec 23, Morning	Psychological support increased on-site and the distribution center
Dec 23, Evening	Distribution of the personal items started and continues into following days
Dec 24, Morning	Remaining personal belongings moved to alternate location
Dec 24-Jan 4	Communication with families of victims intensified

Thematic areas addressed by the crisis team:

1. Managing collection and distribution of the personal belongings left in the building:
 - An inspection of the building revealed a significant number of personal belongings scattered throughout, many damaged or contaminated.
 - A system for cataloging and distributing items was devised in collaboration with the Czech Red Cross. Volunteers cataloged items room by room, labeling them with floor and room numbers. The items were then transported overnight to the nearby Law Faculty to avoid media scrutiny and facilitate a more organized distribution process.
 - Volunteers from the Czech Red Cross cataloged items overnight on December 22–23. Items were carefully labeled by room and floor and transported to the nearby Law Faculty for distribution.
 - Sorting raised sensitive dilemmas, such as identifying items during inventory (e.g., wallets with identification cards), handling blood-stained or damaged belongings, and verifying ownership at retrieval.



- The distribution process, described as deeply emotional, required on-site psychological support. Phones ringing in coats and bags intensified the grief of students and families retrieving belongings.
 - To ensure efficient coordination, the crisis team appointed a member responsible for overseeing the distribution point. The team worked closely with the Law Faculty coordinator and volunteer leaders to address logistical and emotional needs.
 - Media interest in the site required careful management to protect the privacy and emotional well-being of those retrieving items. Journalists were asked to avoid entering the premises.
 - Distribution continued through the evening of December 23 and the following day. Remaining items were transferred to a secure location where retrieval could be arranged over the subsequent week.
2. Memorial activities:
- A large memorial procession, involving faculty student associations and public representatives, was organized to honor the victims.
 - The event emphasized the community's solidarity and the importance of collective mourning.
3. Resumption of academic activities:
- The crisis team addressed dual priorities: reconstructing the Faculty of Arts building and mitigating academic impacts on students.
 - Deadlines were rescheduled, examination procedures were eased, and plans for reopening the building were initiated.
 - Time estimates for the building's restoration were shared, with tasks divided among crisis team members.
4. Security measures:
- The university prioritized defining specific security measures and identifying funding sources to implement them.
 - Long-term strategies included enhancing infrastructure and streamlining crisis protocols.
5. Live press conference:
- The live-broadcast press conference on January 4, 2024, featured the University rector, the dean of the Faculty of Arts, the head of the central crisis management team, and the university's security advisor.
 - This event was pivotal in consolidating and publicly sharing information about the attack's impact, the university's recovery efforts, and plans for enhancing security.
 - Key principles for future university security were announced:
 - Emphasis on individual preparedness (students and staff) for crisis situations.



- Maintaining open campus policies while improving lockdown and evacuation procedures.
- Enhancing warning dissemination capabilities through technological and procedural advancements.
- Strengthening faculty crisis management teams to minimize incident impacts.

6. Communication and media management:

- Media inquiries peaked during this period, focusing on police actions and the attacker's entry. These required detailed responses based on a timeline compiled by the crisis team from staff interviews.
- The crisis team delayed publishing the timeline until after the police's press conference on January 5, 2024, to ensure consistency with official statements.
- Considerable effort was devoted to preparing responses for media inquiries and explaining the university's stance on sensitive topics, highlighting the need for transparency and accuracy.

Key observations

- The Christmas holidays significantly influenced the timing and execution of key actions, such as retrieving belongings and scheduling the press conference. However, the holidays also simplified certain logistical aspects, as classes were not in session, reducing the immediate need to arrange alternative facilities for academic activities.
- Crisis team members faced considerable stress, highlighting the importance of rest and personnel rotation.
- The live press conference provided an opportunity not only to set a clear direction for future university security, reflecting lessons learned from the incident, but also to communicate the university's actions and its strong commitment to ensuring the safety and well-being of its community.
- Coordinating memorial events and rebuilding efforts underscored the university's commitment to both honoring the victims and ensuring long-term resilience.

The following analysis highlights the alignment and discrepancies between the priorities outlined in the methodology of the Ministry of the Interior and the actual priorities addressed by the Central Crisis Staff of Charles University during the response to the December 21, 2023, attack. These comparisons are summarized in Table 3.

Discussion

The response of the Central Crisis Management Team (CCMT) at Charles University to the December 2023 attack serves as a critical case study for assessing both the effectiveness of the university's crisis management and the applicability of official crisis response methodologies for academic institutions. By systematically



Table 3 Comparison of priorities in the methodologies of the Ministry of the Interior of the Czech Republic and priorities recorded by the central crisis staff of Charles University following the attack at the faculty of philosophy on 21 December 2023

According To The Methodologies Of The Ministry Of The Interior Of The Czech Republic			According To The Reality After The Attack On The Charles University Faculty Of Arts In Prague						
Phase	Duration From The Attack hours	Crisis Team Priorities	Phase	Phase	Time Frame			Duration From The Attack hours	University Central Crisis Management Team Thematic Areas
					Beginning	End	Duration		
Phase 1	0:15	<ul style="list-style-type: none"> - Immediate Response at the incident scene before police takes control - Alerting the Police - First Aid 	Phase 1	Immediately After the Attack Until the Arrival of the Czech Police	21.12.2023 14:59	21.12.2023 15:05	0:06	0:21	INCIDENT SITE <ul style="list-style-type: none"> - Warning the shooting emergency line 158, WhatsApp, SMS - Spontaneous evacuation / lockdown - First aid - First information from the incident site spreads (social media, phone calls)
				From the Arrival of the Czech Police to the Neutralization of the Attacker	21.12.2023 15:05	21.12.2023 15:30	0:15		INCIDENT SITE <ul style="list-style-type: none"> - Spontaneous and controlled evacuation / lockdown - Police intervention in underway - Care for the executed (Ambulance Service) - A pro-crisis staff of the faculty is formed in lockdown and issues first instructions
Phase 2	0:15 - 3:00	<ul style="list-style-type: none"> - Coordination with the Rescue System units on site - Protection of other activities - Initiation of management according to the coordination plan - Protection of Other Activities - Initiation of Management According to the Coordination Plan 	Phase 2	From the Neutralization of the Attacker to the Completion of the Evacuation of All Present Persons. The Incident Site is Closed by the Police and Under the Control of the Integrated Rescue System	21.12.2023 15:20	21.12.2023 17:20	2:00	0:21 - 2:30	INCIDENT SITE <ul style="list-style-type: none"> - People in lockdown wait for police rescue - The evacuated are gathered by the police in the Rudolfinum building opposite to the Faculty of Arts - Police intervention in the building continues CRISIS CENTER <ul style="list-style-type: none"> - A crisis team of the faculty established in the nearby restaurant - First call to members of the University Central Crisis Management Team (14:00) and their first meeting at 17:00 - Finding out what happened (media, police, witnesses) - Adoption of preventive security measures (cancellation of events over 25 people) - Identifying victims by calling students and employees
				The First Hours of Operation of the Central Crisis Staff	21.12.2023 17:20	21.12.2023 20:00	2:40		2:30 - 5:10
Phase 3	3:00 - 6:00	<ul style="list-style-type: none"> - Stabilization of the Crisis Staff Operations (logistics, facilities) - Status of the Injured - Update of Information on the Situation 	Phase 3	Strengthening of the CCT as a Command Center for Response Management - Limit the Takeover of the Faculty of Arts Building	21.12.2023 20:00	22.12.2023 12:15	16:15	1/2 - 2 day	INCIDENT SITE <ul style="list-style-type: none"> - closed by police CRISIS CENTER <ul style="list-style-type: none"> - Faculty building - Preparation of a cleaning company for biological waste - Preparation of a security agency for entrance control - Initial considerations about the system for issuing personal belongings left during the evacuation in the building - Addressing traffic restrictions near the faculty with the Prague City Hall Transport Department
					Measures After the Takeover of the Building and the Commencement of Coordinated, Passive Psychological Assistance	22.12.2023 12:15	22.12.2023 19:00		6:45
Phase 4	Later	<ol style="list-style-type: none"> 1. What About Tomorrow? 2. Restoration of the Crisis Staff Team 3. Broader Internal Communication 	Phase 4	Distribution of Items and Communication with the Bereaved	22.12.2023 19:00	23.12.2023 19:00	24:00	3 day	CRISIS CENTER THEMATIC AREAS <ul style="list-style-type: none"> - Faculty Building - Inspection of the building to assess damages (12:15) - when will it be possible to partially and fully resume operations? - Specialized cleaning company started cleaning at 13:00 (immediately after inspecting the premises) - another company called for cleaning larger waste (doors, etc.) - Security company on site with police - only allowing patients with permission from JIP UK - Priority given to picking up passports of Erasmus international students
					Specifying the Outlook for the Reconstruction of the Building and the Restoration of Studies	23.12.2023 19:00	26.12.2023 19:00		72:00
Phase 5			Phase 5	Stabilization of the CCT and Familiarization with All Agendas Through Team Coordinators	26.12.2023 19:00	04.01.2024 19:00	21:600	2 - 3 week	CRISIS CENTER THEMATIC AREAS <ul style="list-style-type: none"> - Confusion with the police, there are many media outlets at the issuing point - Information on the website that the exact issuance will be from 4.1.2024 - What to do with items that were not found. If they are not claimed, the Czech Police will burn them. - Issuance of personal belongings - Crisis hotline of the University - Main building of FF - Study-related questions - Consolence - Communication (PR) - Finance, Foundation fund



comparing the university's actions with the four-phase crisis management framework defined by the Czech Ministry of the Interior, this study identifies both areas of alignment with established guidelines and key gaps where real-world crisis response extended beyond the Ministry protocol.

Hypothesis 1: The Central Crisis Management Team addressed thematic areas that aligned with the crisis management guidelines defined by the Czech Ministry of the Interior, indicating adequate preparedness and an effective response to the crisis situation according to the Ministry's standards	Confirmed
Hypothesis 2: In addition to addressing thematic areas covered by the Ministry's guidelines, the Central Crisis Management Team also addressed areas beyond these pre-defined categories, indicating the need for expanding and refining crisis management frameworks for academic institutions	Confirmed

The findings confirm that the CCMT effectively followed the Ministry's methodology, particularly in the immediate response (Phase 1) and initial coordination (Phase 2). However, the complexity of the incident required the team to address additional crisis management areas not explicitly covered in the framework, such as long-term psychological support, media relations, handling victims' personal belongings, and organizing memorial activities. These expanded responsibilities highlight the limitations of the existing framework in fully capturing the operational realities of crisis response at universities. The differences between the Ministry's recommended practices and the university's response do not indicate misalignment but rather reflect the need to address a wider scope of thematic areas during crises.

Based on these findings, the study suggests extending the Ministry's four-phase model to a six-phase framework, better reflecting the longer-term crisis management needs of academic institutions. The proposed expansion of the Ministry's four-phase crisis management framework to a six-phase model introduces two additional phases that address critical post-incident activities not explicitly covered in the original methodology.

Phase 5 focuses on activities related to regaining control of the building after law enforcement secures the site. This includes coordinating access for authorized personnel, conducting the initial technical inspections, organizing the retrieval of personal belongings left behind during the evacuation, and overseeing the first stages of cleaning and structural repairs. Ensuring security during this phase is essential, as the site remains sensitive and may require controlled access for investigative purposes, facility restoration, and psychological support teams.

Phase 6 encompasses all subsequent recovery efforts that extend beyond immediate stabilization and building restoration. This includes long-term psychological support for victims, students, and staff, coordination of memorial activities, sustained communication with the families of victims, and the evaluation of security protocols to improve institutional preparedness for future crises. The integration of this final phase ensures that crisis management does not end with physical recovery but also addresses the broader social, emotional, and organizational impacts of the incident.

The analysis of crisis response phases confirms that the CCMT largely adhered to the Ministry's crisis management framework, particularly during



the immediate response (Phase 1) and initial coordination (Phase 2). The team successfully implemented core procedures, such as site isolation, coordination with first responders, and stabilizing the situation. The Methodology section outlined the comparative approach used to assess this alignment, ensuring that thematic areas were systematically categorized and mapped onto the Ministry's crisis phases.

However, while the CCMT's response was in line with the national guidelines, the findings also reveal that the team was required to address additional crisis priorities that were not explicitly covered in the framework. These include post-incident recovery efforts, psychological support mechanisms, and coordination of victim services—highlighting the practical limitations of the existing methodology in fully addressing the demands of real-world crises at academic institutions.

Key differences between the prescribed practices and the team's response include the need for additional thematic areas:

- **Managing personal belongings:** Cataloging, distributing, and safely storing belongings left during evacuation, including handling sensitive items, such as passports and victims' personal effects.
- **Organizing memorial activities:** Coordinating candlelight vigils, establishing memorial sites, and managing public expressions of grief while balancing logistical and emotional challenges.
- **Psychological support across multiple levels:** Providing immediate and long-term support to students, staff, and victims' families, including the creation of peer-support initiatives and addressing emotional distress at distribution points.
- **Comprehensive communication efforts:** Engaging with media, the public, and other stakeholders in a highly visible and sensitive crisis, ensuring consistent and respectful messaging.
- **Building coordination and security:** Addressing post-crisis issues, such as building inspections, security arrangements, and managing structural restoration.

These expanded responsibilities demonstrate that while the methodology serves as a solid foundation, it does not encompass the full range of tasks encountered in large-scale crisis scenarios. A pro-active and flexible crisis management team must be prepared to address challenges that exceed standard recommendations, as was evident at Charles University.

The findings from the "Results" chapter of our study illuminate several critical aspects of the crisis management response to the shooter attack at Charles University in December 2023. This discussion aims to explore these findings in relation to the existing body of knowledge on crisis management, especially within academic settings, and to recommend areas for future research and practical improvements. Part of the findings addresses the current recommendations given in the guidelines published by the Czech Ministry of Interior. Part are relevant for the crisis management team.



Individual preparedness and self-reliance

Once the attack at Charles University occurred, the immediate response was heavily reliant on the individuals at the scene due to the absence of professional personnel. People near the attacker had to decide quickly whether to flee or hide, while the faculty and university management were forced to activate and manage the crisis team without external support. This situation is typical for soft targets where the police or other governmental bodies might not immediately assist with the physical threat or provide necessary guidance. Bhaduri (2019) discusses the importance of leveraging culture and leadership in crisis management, suggesting that enhancing leadership capabilities within University crisis management teams can significantly improve their effectiveness under such circumstances. The team's high expectations for external support led to significant frustration and wasted effort when help was not forthcoming. Moreover, the limited assistance from first responders like the police, who failed to provide timely or adequate information even when contacted directly by the secretary, the vice dean, or the university itself, underscores the critical need for individual preparedness in such emergencies.

Alerting and communication during and after the attack

The study highlights significant communication challenges faced by the Central Crisis Management Team. According to the Basics of Soft Target Protection Guidelines by Kalvach (2016), establishing effective communication channels is crucial, and our study's recommendations align with these guidelines to enhance the response to soft target threats. Especially in providing timely and accurate information to the university community and the public. This aligns with the existing literature emphasizing the importance of robust communication strategies in crisis management, as demonstrated by Shenhar et al. (2010) who underscore the importance of implementing effective risk and crisis communication programs (Shenhar et al., 2010). Enhancing the University's crisis communication plan, including the implementation of a comprehensive warning system and training for staff and students on emergency procedures, could markedly improve response effectiveness in future crises. Beyond implementing robust technological solutions, it is crucial to prepare soft target personnel for the possibility that these systems may be slow or only partially functional. Individuals must be ready to improvise with whatever tools they have—such as email, WhatsApp groups, or IP phones—to effectively and swiftly disseminate necessary information and warnings. The primary focus should be on preparedness to act, not solely on reliance on seemingly all-solving technological solutions. Furthermore, a significant task is to enhance the competencies of those who will be disseminating messages, ensuring that they do not face dilemmas during the crisis incident.

Psychological support and recovery

The pro-active measures taken by the Central Crisis Management Team in providing psychological support echo the findings of Israeli and Reichel (2003), who discuss



the critical role of human resources in crisis management (Israeli & Reichel 2003). Building on frameworks suggested in studies such as Suman (2016), the team effectively implemented several support mechanisms, including the establishment of a hotline and initiation of a donation fund to support the victims, thereby addressing the immediate and long-term psychological needs of those affected. Suman's work emphasizes the necessity of structured psychological support programs that incorporate both crisis intervention and ongoing mental health services to enhance recovery processes in academic settings.

This approach is consistent with the recommendations of Jahantigh et al. (2018), who stress the importance of psychological support in crisis management models. Future efforts should focus on integrating mental health resources into the university's crisis management framework more seamlessly. The crisis management model using fuzzy cognitive map by Jahantigh et al. (2018) underlines the importance of adaptable strategies in crisis management that could further support our approach to mental health integration, ensuring that support is readily available for all members of the university community. Additionally, psychological support is needed at multiple levels—from consultations within the crisis management team, through the editing of all issued texts, interventions at the incident location, memorial sites, distribution points, to group post-traumatic support groups, ensuring comprehensive coverage and support across all facets of the crisis impact.

Crisis management team and plans potential

A fundamental tool for managing a crisis is the crisis management team, which must be activated promptly and operate effectively under pressure. In the case of the attack on December 21, the first activation occurred during the lockdown itself, facilitated by the coincidental presence of most of the faculty management in the building. Remarkably, many were located on a floor unaffected by the attack, enabling immediate coordination. Within a few minutes, the team began addressing the faculty's initial priority needs, including disseminating warnings, instructing lockdowns, and supporting police efforts.

However, the experience highlights a critical question: how much can crisis management rely on pre-defined plans when real-world crises involve numerous unpredictable variables? Plans provide essential frameworks, but the scope, nature, and partners involved in a crisis response are often dictated by circumstances beyond the organization's control. Factors, such as the scale of the incident, available resources, the nature of partnerships, and the specific needs of those affected, can significantly alter the agenda and its execution.

For soft targets like universities, which usually lack dedicated, full-time professional crisis management teams, these variables underscore the inherent variability in response capabilities. While larger institutions may have greater resources and structured crisis plans, smaller organizations often operate with minimal means, focusing on identifying critical needs and meeting basic requirements. The ability of smaller organizations to respond comprehensively is limited, forcing them to prioritize narrowly and rely heavily on external partners or spontaneous efforts.



The situation at Charles University demonstrates both the strengths and limitations of relying on crisis management plans. While the university had general preparedness guidelines and a central crisis team, the scale and complexity of the attack required the team to adapt and expand its response significantly beyond pre-defined protocols. This adaptability was facilitated by the leadership's presence, which enabled swift decision-making. However, the same adaptability may not be as feasible in smaller organizations with fewer resources or less experienced personnel.

Ultimately, the success of a crisis management team hinges on its ability to combine structured planning with flexible, real-time decision-making. While pre-defined plans remain indispensable for guiding the initial responses and ensuring that critical areas are not overlooked, they cannot account for the full scope of potential crises. Organizations must also invest in building a culture of resilience and empowerment, ensuring that leaders and staff are prepared to adapt plans dynamically, address emerging needs, and collaborate effectively under pressure.

Limitations of this study

While we aimed to provide an in-depth analysis of the crisis response following the December attack, several limitations should be acknowledged.

First, we relied on data that does not include all internal documents of the University Crisis Team, as some of these contain sensitive security and personal information. Additionally, we were unable to interview all central crisis management team members, who could have provided an even more nuanced and comprehensive perspective on the situation. Nevertheless, we believe that our analysis presents a well-founded and factual picture based on the available information.

Second, our study primarily focused on thematic areas and crisis management phases, using the Czech Ministry of the Interior's methodology as the baseline. This choice was made, because the methodology serves as a key reference for crisis response at Czech soft targets, and we aim to contribute to its further development. However, we recognize the significant potential of conducting an international comparative analysis of best practices and crisis management protocols from different countries, particularly regarding large-scale violent attacks on soft targets.

Conclusion

The attack at Charles University on December 21, 2023 provided a critical opportunity to evaluate both the practical application of the Czech Ministry of the Interior's crisis management methodology and the effectiveness of the university's Central Crisis Management Team.

The attack tested not only the adherence to established guidelines but also the adaptability of the university's leadership under unprecedented circumstances. Initial evaluations confirm substantial alignment with the Ministry's methodology, particularly during the immediate response and operational coordination phases. However, the complexity of the situation necessitated addressing a much broader agenda



that extended beyond the guidelines, emphasizing the importance of integrating memorial activities, enhanced psychological support, and coordinated communication strategies into the university's crisis framework.

This expanded scope reflects the dynamic and variable nature of crisis management for soft targets, demonstrating that pre-defined plans, while foundational, must be supplemented by adaptive leadership and real-time decision-making. This analysis reveals that while the Ministry's methodology provides a robust starting point, effective crisis response for academic institutions must also account for unpredictable variables, available resources, and context-specific challenges.

Based on the findings of this study, we recommend the following actions for Charles University and similar academic institutions:

1. **Establish clear communication protocols:**

- Early alert systems: Implement a university-wide early warning system that can quickly alert all members of the community in the event of an emergency. This system should be tested regularly.
- Regular updates and training: Provide regular training and updates to all university staff and students on how to respond during physical attack, emphasizing their personal pro-active role in such situation.
- Real-time information-sharing: Establish protocols for real-time information-sharing between the university's crisis team, staff, students, and first responders to improve situational awareness and response efficiency.

2. **Enhance psychological support systems:**

- Immediate and long-term support: Develop a structured program that offers both immediate crisis intervention and long-term psychological support for victims and witnesses. This program should include access to mental health professionals trained in trauma and recovery.
- Training for all staff: Incorporate training for faculty and administration on recognizing and responding to signs of trauma, ensuring that psychological support is an integral part of the university's crisis response.

3. **Comprehensive review and drills:**

- Simulated drills: Conduct simulated emergency drills that involve not only the crisis management team but also the general university population, including students. These drills should mimic potential scenarios to test the effectiveness of communication systems, evacuation procedures, and first responder collaboration.
- After-action reviews: After each drill or actual incident, conduct a thorough review of the response to identify strengths and areas for improvement. Adjust the crisis management plan based on feedback from these reviews.

4. **Community involvement and security culture:**

- Community engagement programs: Develop programs that engage the university community in safety and security measures. This could include work-



shops, seminars, and forums that educate on the importance of personal preparedness and community resilience. Additionally, consider integrating students into reception duties or peer activities to enhance psychological and security efforts. This involvement not only empowers students by giving them active roles in security protocols but also fosters a deeper understanding and commitment to collective security and mental health support within the campus community.

- Feedback mechanisms: Establish a clear and accessible feedback mechanism that allows students and staff to contribute to safety discussions and improvements through direct discussions and forums. These can be conducted in-person or in a hybrid format online, which we find to be the most effective approach. This method not only builds trust but also ensures that the community feels actively involved in their own safety processes.

5. Legal and ethical preparedness:

- Clear guidelines on privacy and ethics: Develop clear guidelines that balance the need for security with respect for privacy and ethical considerations, particularly in communications during and after a crisis. Ensure that these guidelines comply with legal standards and respect individual rights.

Closing thoughts

The response of Charles University's Central Crisis Management Team to the active shooter incident in December 2023 has significantly enriched our understanding of crisis management within academic environments. The practical insights gained from this event have led to a clearer understanding of the complexities involved in managing a large-scale crisis at an institution like a university. While the incident highlighted areas of strength, such as the team's initial robust actions, it also raised new questions about preparedness for such unprecedented events.

A striking observation from this case is the breadth of the agenda the university managed independently, ranging from psychological support and crisis coordination to securing and reconstructing the affected building, communicating with victims' families, and organizing commemorative activities. These are areas where it would be reasonable to expect greater involvement from municipal and state authorities. The burden placed on the university in addressing such a wide range of responsibilities underscores the need for clearer delineation of roles between institutions and public agencies during crises. For instance, state or local authorities could take a more active role in providing psychological and logistical support, overseeing the physical and emotional security of impacted communities, and leading public-facing initiatives, such as memorial events and external communications.

Although enhancing manuals and protocols is a logical step, the experience demonstrates that these tools are only as effective as their integration into the real-world dynamics of academic institutions. Competence and interpersonal relationships often challenge the mere adoption of documents, underscoring the need for nuanced approaches that extend beyond formalized plans. Moreover, whether the same



institution, having gained this experience, would respond better in a future crisis remains uncertain. New situations, personnel, and potentially restrictive protocols could present unforeseen challenges, sometimes limiting rather than guiding effective decision-making.

The attack also raises critical questions about the role of governmental and local authorities, as well as how media shape the narrative of such incidents. Whether an event is framed as a localized incident or a national catastrophe—and whose tragedy it is perceived to be—profoundly impacts the expectations and responsibilities placed upon those affected and those tasked with leading the recovery.

Finally, the personal characteristics of crisis actors come into sharp focus. Their willingness to assume responsibility, go beyond formal obligations, and make high-stakes decisions in a hostile and high-risk environment remains a pivotal factor. The interplay of institutional frameworks, individual agency, and external influences underscores the complexity of effective crisis management. Moving forward, the key challenge lies in balancing preparedness with adaptability, while fostering collaboration between universities, municipal bodies, and the state to ensure resilience in the face of evolving threats.

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Declarations

Conflict of interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

Ethical approval This study was conducted in accordance with ethical standards of Security Journal.

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