

BMOE6001 - Critical Incidents

Introduction

Mountain environments are inherently unpredictable and challenging, requiring those who venture into them to possess sound judgment, technical expertise, and the ability to respond effectively in emergencies (Sumann et al., 2020). As Freeman et al. (2018) state, “the combination of steep terrain, unpredictable weather, and isolation creates unique challenges that demand swift and effective responses in emergencies” (p. 3).

This report critically analyses the response to a critical incident on the steep terrain of Crib Goch, Snowdonia, on the 7th of March 2020. It evaluates the behaviours, decisions, and actions of the group involved, considering their alignment with best practices in wilderness first aid, risk management, and leadership. The analysis encompasses the group’s decision to descend an unofficial route under adverse conditions, their hasty response to Person D’s fall, the provision of first aid, and their communication with mountain rescue (MR). By examining these decisions and actions, the report highlights both strengths and shortcomings, offering insights into managing emergencies in remote environments.

Crib Goch is an exposed arête in Snowdonia, Wales, renowned for its narrow ridges and technical demands. On the day of the incident, adverse conditions—including poor visibility (approximately 10 metres), high winds, and wet, slippery terrain—exacerbated the challenges of traversing the route (BraveDave, 2020). According to the Met Office (2020) climate summary, the period from the 7th to 15th of March was characterised by unsettled weather with belts of rain crossing the country at regular intervals, interspersed with brighter showery weather, and high winds with gusts up to 70 mph recorded in some areas. These factors culminated in a serious fall, requiring intervention by the Llanberis Mountain Rescue Team.

Through considerations of technical and academic literature, this report evaluates the group’s risk assessment, casualty care, and leadership in the context of a critical incident. It also considers the implications of filming in hazardous environments and the influence of the curated video narrative on audience perceptions. Finally, it reflects on lessons learned and provides evidence-based recommendations for safer practices in mountain environments, highlighting the importance of preparation, emotional regulation, and professional rescue services (Rhue, 2018; Priest and Gass, 2018; Holzman et al., 2019).

Incident Overview

On the 7th of March 2020, Persons A and B were traversing Crib Goch, with Person A documenting the experience using an action camera. During their ascent, they encountered Persons C and D, who were also navigating the ridge. Although unfamiliar with one another before the day, the two pairs paused to assess the deteriorating conditions. The decision to descend via an unofficial escape route leading to the Pyg Track was made collectively, informed by the worsening weather and the group's prior familiarity with the route (BraveDave, 2020).

The steepness and wet conditions of the escape route increased its hazards significantly, with the grass described as "worse than, or like ice" by person A (BraveDave, 2020). While descending, Person D slipped and fell approximately 200 metres, disappearing into the mist. The group's response to this critical incident began with a hasty search. During this time, Person A estimated the distance of the fall and observed visible crags on the slope, indicating potential trauma to Person D. Despite the significant risks involved, the group continued to navigate the treacherous slope until locating Person D, who was conscious but injured.

Upon reaching Person D, Persons A and B began administering first aid, insulating the casualty from the cold ground with emergency blankets, emptied bags, and spare clothing. Person C contacted mountain rescue (MR), providing location coordinates via an OS map app. Approximately 15 minutes after locating Person D, Person A left the group to seek additional help, eventually finding another party on the Pyg Track who provided extra insulation and moral support. The Llanberis Mountain Rescue Team arrived some time after the fall, stabilising Person D and evacuating them using advanced rescue techniques, including a 100-metre belay system.

Critical Analysis of Behaviours, Decisions, and Actions

Decision to Descend the Escape Route

The decision to descend via the escape route leading to the Pyg Track, while appropriate under the circumstances, highlighted gaps in the group's risk assessment process. The path was familiar to some members, but no explicit discussion of its suitability in the context of the day's weather and terrain conditions is evident. As Priest and Gass (2018) observe, "effective risk management requires continuous evaluation of environmental conditions and their impact on decision-making" (p. 43). The reliance on familiarity with the route suggests the influence of heuristic traps, specifically the "familiarity heuristic," where individuals overestimate safety based on prior experience rather than current conditions (McCammon, 2004). This overconfidence likely

contributed to the failure to anticipate the hazards of the wet, icy grass, which underscores a reliance on past experience without sufficient adaptation to changing circumstances.

Techniques commonly recommended for descending slippery slopes, such as flat-footed steps, sidestepping, and the use of trekking poles for stability, were not observed in the group's descent (Mountain Training Association, 2020). Furthermore, appropriate footwear with sufficient traction, critical for mitigating such risks, appears to have been inadequate. These omissions likely increased the difficulty of the descent and contributed to the severity of the incident. Despite these shortcomings, descending was likely the only viable choice, given the deteriorating conditions.

The Fall and Hasty Search

Person D's fall transformed the situation into a critical incident requiring immediate action. The group's initiation of a hasty search reflected their urgency and concern for Person D's welfare. Person A, who had assumed an informal leadership role, directed the search by focusing on the position last seen (PLS) and likely direction of travel. This demonstrates some alignment with basic search principles, as the PLS is a critical element in effectively narrowing the search area (Mountain Rescue England and Wales, 2020). However, the absence of a structured or systematic plan for the search revealed significant gaps in the group's understanding of safe and effective rescue practices.

Person A's emotional state played a prominent role in shaping the group's response. Their verbalisations, such as "oh christ, I'm gonna have to call mountain rescue" (BraveDave, 2020), while reflective of situational awareness, likely heightened the stress levels of the group and detracted from the cohesion necessary for effective teamwork. Freeman et al. (2018) emphasise the importance of emotional regulation in high-stress environments, as it stabilises group dynamics and enables clear decision-making. Person A's visible distress may have undermined their ability to guide the group safely, as evidenced by their decision to descend the slope quickly, often sliding, to expedite the search. This urgency prioritised speed over safety and exposed the group to similar hazards that caused Person D's fall, such as the slippery terrain and poor visibility.

Hasty search techniques, while necessary in time-critical emergencies, require careful balancing of urgency with safety to avoid additional casualties (Summers, 2016). Best practices for hasty searches emphasise maintaining sightlines, marking progress, and avoiding unnecessary risks, particularly in hazardous environments. However, the

group's response deviated from these principles, with members dispersing and navigating the slope in an uncontrolled manner. Again, heuristic traps may have influenced their behaviour at this stage, such as the urgency heuristic as identified by McCammon (2004), where a cognitive shortcut prioritises immediate action over thoughtful assessment, potentially leading to unsafe decisions in high-stress scenarios.

Despite these shortcomings, Person A's reliance on the PLS and likely direction of travel demonstrates a degree of situational awareness that positively contributed to locating Person D. However, their leadership lacked the coordination and communication necessary to execute a safer, more effective search. According to Mountain Rescue England and Wales (2020), effective leadership in hasty searches requires clear delegation of roles and adherence to basic safety protocols, which were not observed in this instance. The absence of these measures highlights the tension between instinctive urgency and the structured methodology required for successful search and rescue operations.

Casualty Care and Communication with MR

As the group shifted from a hasty search to a more structured response, their actions revealed both strengths and weaknesses. Person A recognised the need for professional assistance early in the search, prompting Person C to contact mountain rescue, demonstrating timely awareness of the situation's severity (BraveDave, 2020). Engaging mountain rescue mid-search allowed resources to mobilise sooner, aligning with Priest and Gass's (2018) assertion that "timely communication with rescue services enables faster response times and improves coordination during emergencies" (p. 72). Providing precise location coordinates via an OS map app further facilitated rescue planning.

However, the decision to delay contacting mountain rescue until the search was underway, rather than at the incident's onset, limited the potential for an even faster response. As Ambrose and Harris (2015) highlight, immediate communication should be a priority to reduce exposure and mitigate risks. This underscores the importance of prompt, proactive coordination in critical incidents.

Upon locating Person D, Persons A and B focused on providing first aid while Person C continued to communicate with MR, relaying updates on the casualty's condition and maintaining coordination. This division of responsibilities was a practical approach to the situation, allowing the group to address multiple priorities simultaneously. Accurate and consistent updates to MR likely contributed to the efficiency of their response, as

effective communication is a cornerstone of search and rescue operations (Mountain Rescue England and Wales, 2020).

The group's first aid efforts were commendable but lacked adherence to structured protocols like DR ABCDE. Efforts centred on insulating Person D from the cold, wet ground using emergency blankets, emptied bags, and spare clothing. These actions aligned with the "E" (Environment) component of the DR ABCDE framework, addressing the risk of hypothermia caused by exposure to adverse weather. However, the absence of a structured approach, including a thorough primary survey of airway, breathing, circulation, and disability, including any significant head or spinal injuries, limited the effectiveness of their care (St John Ambulance, 2020). Furthermore, moving Person D's head to improve comfort, while well-intentioned, was a critical error, potentially exacerbating their injuries. According to Summers (2016), "spinal precautions are essential when managing casualties with potential neck or back injuries, as unnecessary movement can lead to permanent damage" (p. 78). This oversight highlights the need for formal first aid training in wilderness contexts.

Environmental challenges further complicated the group's efforts. The windy conditions repeatedly displaced insulating materials, requiring Persons A and B to secure them using additional clothing or their own bodies. While this showed adaptability, it also reflected gaps in their preparedness. Robust emergency equipment, such as thermal bivvy bags or windproof group shelters, would have been more effective in mitigating exposure risks (Ambrose & Harris, 2015). Person A's inclusion of emergency blankets and a shelter was commendable but insufficient for the severity of the conditions, illustrating the importance of equipping groups comprehensively for remote environments.

Decision to Seek Additional Help

As Person D's condition deteriorated, showing signs of hypothermia and escalating pain, Person A decided to seek further assistance. Dialogue captured in the video reveals that Person D acknowledged their increasing pain, which Person A interpreted as the shock wearing off (BraveDave, 2020) and influenced his decision to seek help. This decision demonstrated initiative but introduced additional risks. Descending alone in hazardous conditions increased Person A's vulnerability, while their absence likely placed additional pressure on Persons B and C to manage Person D's care. Splitting a group in critical incidents is generally discouraged, as it reduces overall safety and coordination (Mountain Rescue England and Wales, 2020).

Despite these challenges, Person A successfully located another group on the Pyg Track, who provided extra insulation materials and ultimately boosted the group's morale. This outcome reflects Person A's determination and resourcefulness but also highlights the limitations of their initial preparation. A pre-established, comprehensive contingency plan could have mitigated these risks by ensuring a safer approach to seeking additional help and better-equipped packs which may have enabled the group to stabilise Person D more effectively without taking any additional risks.

Mountain Rescue Response

The arrival of MR marked a turning point in the incident. Their professional and composed approach contrasted sharply with the group's earlier emotional distress and disorganised efforts. Freeman et al. (2018) assert that "rescue teams must balance technical precision with psychological support to optimise outcomes" (p. 7). MR's ability to stabilise Person D and transport them efficiently underscores the critical role of professional expertise in managing mountain emergencies. Their calm demeanour not only reassured Person D but also stabilised the group, highlighting the value of training and experience in high-stress situations.

Portrayal on YouTube

The portrayal of the Crib Goch incident on Person A's YouTube channel highlights how post-production decisions can shape audience perceptions of critical incidents. On-screen text, added retrospectively, contextualises decisions such as the choice to descend the unofficial route but may create a misleading impression of deliberation during the event itself. For example, text like "shivering like crazy" conveys the seriousness of Person D's condition but reflects post-event awareness rather than real-time understanding. As Galloway (2019) notes, "retrospective framing often imposes coherence on situations that were fluid and uncertain at the time" (p. 17).

Editing choices, including the omission of mundane or less dramatic moments, may amplify tension and distort the depiction of group dynamics. Freeman et al. (2018) suggest that "adventure media often prioritises narrative engagement over accuracy, which risks oversimplifying the complexities of decision-making under pressure" (p. 145). This is evident in the Crib Goch video, where the focus on high-stakes moments may obscure quieter examples of teamwork or competence.

While the video offers valuable insights into the incident, its curated nature underlines the importance of critical evaluation. Priest and Gass (2018) argue that "media

representations of outdoor challenges often reshape events to meet audience expectations for drama and resolution” (p. 198). This reinforces the need to consider how post-production choices may influence the lessons drawn from such portrayals.

Conclusion

The Crib Goch incident highlights how critical decisions, behaviours, and actions during emergencies can significantly shape outcomes.

While the group responded with urgency and some degree of competence, several aspects of their approach could have been improved. Person A's emotional distress and panicked behaviour, although understandable given the severity of the situation, likely impeded their ability to lead effectively and provide reassurance. Nonetheless, the group's swift decision to call mountain rescue and initiate a hasty search for Person D was instrumental in preventing further harm, despite the risks involved.

One alternative course of action would have been to prioritise calling mountain rescue earlier, before commencing the hasty search. This could have expedited professional assistance, reducing Person D's exposure to the cold and physical strain. Additionally, a more thorough assessment of the unofficial descent route's risks, especially in poor visibility, might have led to a safer approach.

From a first aid perspective, adhering more strictly to structured protocols, such as proper spinal precautions and comprehensive assessments, would have improved the group's response. Their well-intentioned efforts, including insulation to mitigate hypothermia, were commendable but less effective due to gaps in their knowledge and preparedness.

This incident underscores the importance of thorough preparation, including appropriate equipment and training. For me, as an outdoor/adventure media creator, it reinforces the need to prioritise safety over documentation. The use of filming equipment during high-stress situations must be secondary to ensuring the safety and well-being of participants. Moving forward, I will adopt a more deliberate approach to balancing media creation with emergency preparedness, ensuring that documentation never compromises safety.

Ultimately, the Crib Goch incident serves as a stark reminder of the unpredictability of mountain environments and the critical importance of preparation, composure, and clear communication. It reinforces the value of continuous learning and skill development for anyone engaged in adventure activities, whether as a participant, leader, or creator.

Reference List

- Ambrose, G. and Harris, P. (2015). *Basics design 08: Design thinking*. 2nd ed. Lausanne: AVA Publishing SA.
- BraveDave (2020). *An Intense Day On Crib Goch (feat. Llanberis Mountain Rescue)*. [YouTube video]. Available at: <https://youtu.be/CRf7CnhOzXY?si=rRIWvZdYhmlEyZDI> (Accessed: 9 January 2025).
- Freeman, J., Bell, M., and Ross, K. (2018). *Managing risk in mountain environments: Principles and practice*. London: Bloomsbury Academic.
- Galloway, S. (2019). *Media framing in outdoor adventure: Implications for audience perceptions*. *Adventure Media Studies Journal*, 12(2).
- Holzman, G., Hunt, S., and Wallace, R. (2019). *Essential wilderness first aid: A guide for outdoor enthusiasts*. New York: Outdoor Press.
- McCammon, I. (2004). Heuristic traps in recreational avalanche accidents: Evidence and implications. *Avalanche Review*, 22(2).
- Met Office (2020). *March 2020 climate summary*. Available at: <https://www.metoffice.gov.uk> (Accessed: 9 January 2025).
- Mountain Rescue England and Wales (2020). *Operations manual*. Available at: <https://www.mountain.rescue.org.uk> (Accessed: 9 January 2025).
- Mountain Training Association (2020). *Technical handbook: Best practices for mountain navigation and safety*. Available at: <https://www.mountain-training.org> (Accessed: 9 January 2025).
- Priest, S. and Gass, M.A. (2018). *Effective leadership in adventure programming*. 3rd ed. Champaign, IL: Human Kinetics.
- Rhue, D. (2018). Psychological responses in wilderness emergencies: Managing stress for optimal decision-making. *Outdoor Leadership Review*, 12(4).
- St John Ambulance (2020). *First aid manual*. 11th ed. London: DK Publishing.
- Sumann, G., Radtke, R., and Burtcher, M. (2020). Risk management in alpine environments: Lessons learned from mountain rescues. *International Journal of Wilderness Safety*, 5(3).
- Summers, D. (2016). *Wilderness first aid field guide*. 2nd ed. Boston: Jones & Bartlett Learning.

