
Event security: interdisciplinary risk communication

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Abstract

Purpose – This study examines how event security stakeholders negotiate risk, resources and action amid functional differences. Focusing on the interpersonal dynamics of interdisciplinary collaboration, we aim to understand how and why decision-makers conflict or agree and identify the strategies they use to productively manage disagreements and coordinate effective security operations.

Design/methodology/approach – This study applied a grounded theory approach to model risk communication and resource negotiation in event security from two large events in the Midwestern United States. Data from both events included naturalistic field observation, informal follow-up interviews and event-related documents. Using purposive sampling and the constant comparison method, we employed the Gioia methodology to develop concepts, build a data structure and present findings in a transferable, systematic and coherent framework.

Findings – There are four main takeaways from this study: (1) Event security is multidisciplinary; professionals' backgrounds and experiences shape their views of risk; (2) Conflicts emerge from differing risk perceptions and management approaches, termed representational gaps; (3) Resource requests are negotiated through appeals to others' risk frames and social influence tactics; and (4) Resource decisions hinge on perceived threat credibility and mitigation feasibility.

Originality/value – This research advances understanding of event security by examining how interpersonal tensions in risk communication hinder resource mobilisation. Unlike prior work, it centres on the micro-level dynamics of interaction – identifying sources of tension and persuasive strategies to mitigate them – offering novel insights into the social mechanisms shaping security collaboration.

Keywords Event security, Risk communication, Resource negotiation, Interdisciplinary collaboration, Representational gaps, Social influence

Paper type Research article

Introduction

High-quality interdisciplinary risk communication is vital to event security and safety operations, which comprise essential risk management functions for organised events such as concerts, festivals and sporting events. The primary goals of event security and safety operations involve reducing identifiable and indefinite risks to human safety at organised gatherings, which range from incidental hazards (e.g. venue-related accidents, natural disasters, crowd agitation) to premeditated acts of violence (e.g. targeted violence and terrorism), and mitigating harm

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when such critical incidents transpire. These highly uncertain, multifaceted problems can only be addressed through well-orchestrated cross-disciplinary involvement from entities with distinct risk management functions, such as event organisers, private security, law enforcement, fire and rescue, and emergency management services (Boyle *et al.*, 2015; Leopkey and Parent, 2009). Yet, although efficient and effective management of physical risks at organised events is predicated on clear and constructive risk-related communications between collaborating entities (Hall *et al.*, 2022; Schütte and Willmes, 2022), extant social science theories either (1) explain collaborative and communicative elements of risk communication separately or (2) are designed for use beyond the event risk management context.

For event risk management, interdisciplinary security and safety collaboration is a double-edged sword. On one hand, representation from multiple entities enables more comprehensive management of event-related physical risks. In this regard, multidisciplinary involvement allows risk management duty-holders to resolve isolated challenges that fit within the purview of individual job functions, as well as larger problems that require *interdisciplinary* problem solving and action. On the other hand, interpersonal friction can emerge when people from different professional backgrounds or roles attempt to work interdependently. Occupational and organisational psychology literature suggests that functional (i.e. job-related) differences among collaborators can generate interpersonal conflict within and between teams (Cronin and Weingart, 2007; Firth *et al.*, 2015), as people may lack shared language, procedures and priorities for a given problem set. For example, Fussey (2015) observed that event security production can be highly contested when security professionals dispute ownership over jurisdictions, processes and competing objectives. Conflict can hamper communication and other essential coordination processes such as planning, task delegation and action (Triana *et al.*, 2021), resulting in detrimental outcomes during critical incidents. Whether for violence prevention or harm reduction, the value of clear, efficient and action-oriented risk communications is demonstrated by high-profile violence incidents. For instance, local police miscommunications impeded early intervention to the Centennial Park bombing during the 1996 Atlanta Olympic Games (Spaaij and Hamm, 2015). Additionally, the tightly coordinated efforts between multiple law enforcement and emergency response agencies resulted in the swift securing of the affected locale and apprehension of attackers following the 2013 Boston Marathon bombing (US House, Committee on Homeland Security, 2025).

Indeed, disagreements and failures in risk communication can hamstring security operations by limiting professionals' abilities to acquire and mobilise resources for essential risk reducing or mitigating endeavours (Spaaij and Hamm, 2015; Zekulin, 2009). For that reason, the interpersonal challenges that accompany interdisciplinary event security and safety collaboration warrant additional study, as academic inquiry into their antecedents and mechanisms have been scarce to date. The present research effort therefore builds upon prior research on the *social* aspects of event security collaboration (Schütte and Willmes, 2022) by exploring sources of interpersonal tension – along with persuasive strategies that may alleviate such tension – in risk communication between professionals from different functions in the event security and safety enterprise. Our research focuses on the level of the interaction, that is, the ebb and flow of conversations around managing security and safety risks through resourcing and action. More specifically, we sought to answer: *How and why might event security and safety duty-holders conflict (or agree), and what strategies do they use to negotiate resources to prevent or mitigate harm?* We begin by delineating how and why existing theories paint an incomplete picture of interdisciplinary risk communication at events, then explain how we addressed our research questions by gathering and analysing qualitative data from longitudinal field observations of two large events in the Midwestern United States.

Interdisciplinary risk communication at events: adjacent theories and explanatory gaps

Large events – whether sporting, musical or otherwise social – pose a wide spectrum of security and safety risks, from routine issues such as traffic, crowd behaviour, weather to low-frequency,

high-impact threats such as terrorism, structure failures, natural disasters (Silvers, 2009). Managing this complex risk environment requires coordinated action across multiple specialised domains, including security, law enforcement, fire/rescue, medical, emergency management, each of which prioritises different likelihoods and consequences of harm. Although such interdisciplinary cooperation should, in principle, enable more comprehensive risk management (March, 1978; Van Winkle and Kullman, 2022), it depends heavily on effective communication across disparate knowledge bases and professional priorities (Power *et al.*, 2025). Yet research on event-security collaboration remains limited (Schütte and Willmes, 2022), leaving little theoretical guidance on how interdisciplinary risk communication operates in practice. To address this gap, we draw on adjacent literature (e.g. multiteam systems, functional diversity and risk communication) to establish the foundations for needed theory development.

First, theories of interorganisational and interdisciplinary collaboration offer useful insights but have notable limitations when applied to event security and safety. Scholarship in this domain tends to emphasise the process effects of collaboration structures such as role division and hierarchy or intra- and interteam differences in knowledge (Majchrzak *et al.*, 2007; Brown *et al.*, 2021; Lanaj *et al.*, 2013; Waring *et al.*, 2018; Ziegert *et al.*, 2022). Of unique relevance to interdisciplinary communications is representational gaps theory, which posits that individuals (in a team context) and teams (in a multiteam or interorganisational context) may conflict or fail to coordinate when their perceptions of work problems diverge (i.e. “representational gaps”) due to incongruence in expertise or operational protocols (Cronin and Weingart, 2007; Firth *et al.*, 2015). Although many propositions from this theory (or related theories) may generalise to event risk management contexts, more specific aspects of event security and safety operations remain under-researched and under-theorised. In particular, much of this research pertains to emergency response or other complex team tasks rather than on pre-incident or incident management conversations that arise in security and safety *preparedness* and *production* (cf. Schütte and Willmes, 2022). In such cases, a critical consideration in conversations about designing and implementing security and safety protocols is that collaborating agencies are often both interdependent *and* specialised in their expertise, authorities and resources (Power *et al.*, 2024). Consequently, some agencies’ risk management actions may influence the outcomes and operations of partner agencies, which likely requires some degree of negotiation either in planning or action phases. Further, research on interdisciplinary collaboration typically relies on self-reports of real-world experiences or observations of simulated response and recovery (Berchtold *et al.*, 2020; Waring *et al.*, 2018), which lacks the fidelity and richness of naturalistic observations (Waring, 2019; Power *et al.*, 2025). Thus, extant research and theory help explain how to organise work responsibilities and prevent harmful conflict, but fall short in explaining how security and safety professionals approach and manage *risk preparedness conversations* in event planning and implementation.

Recognising the dearth of event security collaboration research, Schütte and Willmes (2022) interviewed 47 German event security and safety professionals, identifying organisational, human-related and technical dimensions of collaboration. Notably, one of their interviewees emphasised the importance of “being able to reach agreements together and checking who has which picture of the situation” (p. 465) for smooth collaboration, while others mentioned preconceptions of the work and other involved parties as contributing to conflict. These findings echo what is already well-documented from organisation science, suggesting that managing divergent understandings and resolving disagreements are central to interdisciplinary risk communication. Yet, the specific conversation content and communication strategies used by event security and safety staff remain largely unexamined. Evidence regarding attributes of risk-related messages and their framing are better captured in the field of risk communication.

However, research and theory on risk communication likewise fails to account for interdisciplinary communication among event security duty-holders, as the primary focus of this literature is on risk management authorities’ efforts to persuade the public to use self-protective

measures. This field typically examines one-way communication models, which seek to explain how attributes of risk messengers, messages and receivers contribute to message receivers' behavioural intentions (Balog-Way *et al.*, 2020). For example, Protection Motivation Theory (PMT) describes how and why individuals' appraisals of threat information and self-protective actions influence the (mal)adaptive behaviours they take to remain safe against natural disasters or crime (Babcicky and Seebauer, 2019; Clubb and Hinkle, 2015; Rogers, 1975). Similarly, other mental model approaches to risk management aim to understand what people value, consider and do when perceiving various risks (Besette *et al.*, 2017; Lazrus *et al.*, 2016; Stermann, 2008). Nonetheless, this research does not address the dynamics involved in interpersonal negotiation of threat and risk mitigative action among security and safety professionals through conversational interaction on the ground. Finally, while limited research addresses two-way risk communication (Guan *et al.*, 2021; Höppner *et al.*, 2012; Ping *et al.*, 2016; Regan *et al.*, 2016), such studies also only focus on interactions between risk managing entities and community populations, rather than security and safety professionals situated in an organised event context. The interdependence within event security and safety operations (e.g. mutual reliance on finite material or personnel resources, consideration of activities that would impact other partnering entities or individuals) is central to understanding how risk conversations unfold between security and safety staff, as specialised functions must often coordinate (and negotiate) with each other to mobilise limited resources for risk mitigation.

Taken together, existing research on interdisciplinary collaboration (i.e. across organisations, teams and individuals) and on risk communication does not adequately capture the real-time, cross-disciplinary risk management conversations that occur among security and safety duty-holders responsible for protecting event attendees from violence and other hazards. Understanding interdisciplinary risk communication in event settings instead requires consideration of both collaboration challenges (represented in organisation science, but less so in risk communication research) and conversational elements (represented in risk communication research, but less so in organisation science). Such a risk communication framework should specify (1) sources of interdisciplinary conflict and (2) the processes through which risk information is conveyed, interpreted and operationalised. To that end, this research advances theory by examining how event security and safety personnel navigate the social tensions inherent in interdependent partnerships to mobilise resources for mitigating physical and organisational risks. We first outline the inductive methods used to identify themes in interdisciplinary risk communication and resource mobilisation among security and safety professionals. We then present our findings in a cohesive theoretical model designed to support future scientific inquiry and inform frame-of-reference training for event security and safety operations.

Methods

We used a grounded theory-building approach to inductively develop a model of risk communication and resource negotiation in an event security context (Charmaz, 2006; Glaser and Strauss, 2017). This method seeks to rigorously derive transferrable principles – concepts that can be applied beyond the immediate study setting (Gioia, 2021). The analytic process involves purposive sampling from theoretically relevant populations (Lincoln and Guba, 1985) and iterative movement between data collection and analysis using the constant comparison method to identify and refine interrelated concepts salient to participants (O'Reilly *et al.*, 2012). We employed the Gioia methodology (Gioia *et al.*, 2013), which provides a systematic structure for developing and reporting inductive theory by constructing a data structure of first-order concepts (e.g. shared or emphasised phenomena based on participants' words and observed actions) and second-order concepts (e.g. abstract clusters of theoretically related first-order concepts that are interpreted and named by the researcher), generating a model grounded in that data structure, and presenting findings within a coherent analytical framework.

We chose this grounded theory approach for three reasons. First, our central goal was to develop a model of interdisciplinary risk communication for security and safety operations at events. Unlike many content or thematic analytic approaches that formulate descriptive themes and topic categories but often do not explicate how they relate to or influence each other, grounded theory relies on intensive, simultaneous data collection and analysis to develop theory in such a way that ensures phenomena are richly exploited and explained (Braun and Clarke, 2014; Naeem *et al.*, 2023). This is less feasible through interview or survey-based methods, which have been used for many traditional risk communication models and teamwork models. Second, grounded theory seeks to explain *social phenomena*, not simply subjective participant experiences obtained through means of self-report (O'Reilly *et al.*, 2012). Although analyses of subjective experiences and cognitive mental models have much utility for research on collaboration and risk communication, they fall short of explaining how socially embedded behaviours and interactions unfold. Third, there is ample precedent for use of grounded theory to explore and explain human interaction processes in a variety of other risk-related contexts, such as outpatient healthcare (Barfod *et al.*, 2006; Brien *et al.*, 2019), rapid response healthcare teams (Martland *et al.*, 2016) and human safety (Austin *et al.*, 2020). While we believe our grounded theory approach was best suited to our research question, we acknowledge that iterative data collection of this nature is resource-intensive and also requires careful and consistent reflexivity to mitigate bias.

Sample and context

We collected observational, follow-up interview and document data from two large US events [1]: a statewide multi-day cycling event and a multi-day music festival. Relevant documents (e.g. planning documents, action plans, training manuals) were reviewed in-depth prior to in-person observations and used as supplements to the analysis. Collection of in-person data (e.g. security and safety planning conversations, staff trainings, event grounds tours, informal staff discussions, follow-up interviews and event implementation) took place from May 2024 through August 2024. The observation period spanned 90 total hours of intermittent social observation (not including rapport-building or time exploring the local context), as event-related planning and implementation activities in the chosen locale only constituted a portion of town and county employees' day-to-day responsibilities. In this period, we attended 10 event security and safety planning and implementation meetings and 5 group training sessions, conducted 19 informal interviews between observations to gain additional context and insight behind participants' decision-making processes, and documented other notable observations in the local environment across 11 overarching field notes. Key observations and dialogue were documented in field notes using guidelines by Phillippi and Lauderdale (2018), drafted during observation periods and elaborated on immediately afterward. When possible, direct quotations were transcribed from participants' conversations with each other (or when not possible, paraphrased in our field notes) and with the principal investigator. Given that our research focus was on risk communication, the data informing our theoretical model primarily originate from direct quotations and paraphrases from participants' real-time dialogue in meetings, interviews and risk management operations, as well as past recalled risk management conversations shared through interviews. All other observational and archival data were used to ground the researchers' interpretations in the geographic and historical context of the participants and their work. Following the observational period, we met with two primary liaisons to verify the accuracy of our observations and soundness of our preliminary conclusions. Table 1 includes a summary of the study data including discrete participant engagements, participant affiliations and roles, observation hours, event phases and the overarching field notes that encompassed them.

Because data collection occurred *in situ* with event security and safety practitioners, we took several steps to minimise risks to participants. First, our university's institutional review board (IRB) reviewed and approved the study, determining that it posed minimal risk

Table 1. Summary of study observations and data for ABR and SCMF

Field note (event phase)	Observation hours	Discrete participant engagements	Affiliations (roles)
Field Note #1 (SCMF preparation)	4 h	Interview #1	EMA (Director)
		Meeting #1	EMA (Director), SCMF (Security and Safety Director)
		Meeting #2	EMA (Director), SCMF (Owner, Festival Director, Security and Safety Director)
Field Note #2 (ABR and SCMF preparation)	3 h	Interview #2	EMA (Director)
Field Note #3 (ABR and SCMF preparation, disaster observation)	16 h	Interview #3	EMA (Director)
		Training session #1	EMA (Director), SCMF (Security and Safety Director), other various attendees
		Interview #4	SCMF (Security and Safety Director)
		Interview #5	EMA (Director)
		Meeting #3	EMA (Director), Town (Mayor, ~10 town staff), ABR (Director, staff)
		Meeting #4	EMA (Director), Town (Mayor, staff), ABR (Director, staff)
		Natural disaster response	EMA (Director), LE (multiple jurisdictions), EMS and hospital (multiple jurisdictions), FR (multiple jurisdictions), Town (residents, dispatch staff), NWS
		Training session #2	EMA (Director), SCMF (Security and Safety Director), other various attendees
		Interview #6	SCMF (Security and Safety Director)
		Training session #3	EMA (Director), FR (~10 Firefighters)
		Training session #4	EMA (Director), SCMF (Security and Safety Director), other various attendees
Field Note #5 (SCMF preparation)	8 h	Training session #5	EMA (Director), SCMF (Security and Safety Director, Festival Director), EMS and hospital (~20 staff), NWS (staff), LE (Sheriff and Deputy), FR (~3 staff)
Field Note #6 (SCMF preparation)	7 h		EMA (Director)
			SCMF (Festival Director)
Field Note #7 (ABR preparation)	3 h	Interview #7	EMA (Intern), Town (Mayor, staff), EMS (private and hospital), LE (Captain, local officers, Sheriff and deputies, two State Troopers), ABR (Director, staff)
		Interview #8	EMA (Director, Intern), SCMF (Security and Safety Director)
Field Note #8 (ABR implementation, SCMF preparation)	11 h	Meeting #5	EMA (Director)
		Meeting #6	EMA (Director, Intern), SCMF (Security and Safety Director)
		Interview #9	EMA (Director)
Field Note #9 (ABR implementation, SCMF preparation)	10 h	Interview #10	LE (Deputy)
		Interview #11	SCMF (Security and Safety Director)
		Interview #12	LE (Sheriff)
		Meeting #7	EMA (Director, Intern), SCMF (Security and Safety Director)
Field Note #10 (SCMF preparation)	4 h	Interview #13	FR (Firefighter)
		Interview #14	LE (Deputy)
		Meeting #8	EMA (Director, Intern), SCMF (Security and Safety Director)

(continued)

Table 1. Continued

Field note (event phase)	Observation hours	Discrete participant engagements	Affiliations (roles)
Field Note #11 (SCMF implementation)	11 h	Interview #15 Meeting #9	EMS (Staff) EMA (Director, Intern, staff), Town (staff), SCMF (Security and Safety Director), Private security (Front-of- House Lead, Back-of-House Lead), LE (State Trooper), NG-CST (two staff), NWS (staff)
		Interview #16 Meeting #10	Private Security (Front-of-House Lead) SCMF (Security and Safety Director), EMA (Intern, staff)
		Interview #17	EMA (Intern)
		Interview #18	EMA (Director)
		Meeting #11	EMA (Director, Intern, staff), Town (staff), SCMF (Security and Safety Director), Private security (Front-of- House Lead, Back-of-House Lead), LE (State Trooper), NG-CST (two staff), NWS (staff)
		Interview #19	SCMF (Security and Safety Director)

Note(s): Field notes and observation hours encompass observations and organic interactions in the local context beyond only formal meetings and informal interviews. Discrete participant engagements refer to clearly defined interactions (e.g. requested conversations or meetings) with and between participants (as opposed to organic conversations that arise in the midst of work activities) and thus reflect only a portion of the total documented field observations. Further, observation hours do not include participant rapport-building contact hours prior to the study, time spent familiarizing ourselves with the geographic area, or the post-study data verification meeting with our primary research site liaisons

EMA = Emergency Management Agency, LE = Law Enforcement, EMS = Emergency Medical Services, FR = Fire and Rescue, NWS = National Weather Service, NG-CST = National Guard Civil Support Team

given procedure for protecting data and participant identities. Second, we obtained consent from professionals to observe planning meetings and events operations. Third, we ensured anonymity in reporting by referring to job functions only and using pseudonyms for events: ABR (cycling) and SCMF (festival).

We analysed data from both events together because (1) our research question – how do security and safety professionals communicate about risk and negotiate for essential resources? – applied similarly across both settings; (2) our primary practitioner liaison worked in the county encompassing both events; and (3) planning for both events occurred concurrently and involved overlapping personnel. Additional context details for each event follow.

Event #1: ABR. ABR is a privately owned and operated statewide cycling event held annually in the United States. Approximately 18,000 participants registered for the event, with additional attendees present at various stops. Participants completing the full route travelled over 400 miles, passing through 21 towns, 7 of which hosted participants overnight. We observed planning and operational activities in four rural towns (populations 100 – 5,400 based on the 2020 US Census Bureau). The dataset includes multiple interactions representatively of 10 entities and 8 event-related documents (e.g. historical and current event participant pamphlets, historical and current city and county security and safety plans). Entities included:

- (1) County emergency management
- (2) State, county and town law enforcement

- (3) Town mayor, emergency medical services and fire department
- (4) Private mobile ambulance services
- (5) National Weather Service (NWS)
- (6) ABR event production

Event #2: SCMF. SCMF is a three-day music festival held at one of the ABR pass-through towns (population ~650 according to the 2020 US Census Bureau). The festival typically attracts ~15,000 attendees, with estimates for the observed year closer to 20,000. We observed the planning and operational activities across three sites: the city where the event promotion and production company is located, the county seat of the festival's host county and the festival's host town. The dataset includes social interactions among representatives of 16 entities and nine event-related documents (e.g. historical and current security and safety plans, training documents, event pamphlets, event schedule). Entities included:

- (1) County emergency management
- (2) State, county and town law enforcement
- (3) Town dispatch
- (4) Off-duty law enforcement from two neighbouring cities
- (5) Town emergency medical services and fire department
- (6) Additional private medical support
- (7) Festival owner, festival director and festival security and safety director
- (8) NWS
- (9) National Guard Civil Support Team (NG-CST)
- (10) Two contracted private security companies
- (11) Volunteer staff

Data analysis

Using the constant comparison method central to grounded theory (Glaser and Strauss, 2017), we analysed data as they were collected, refining our understanding as new information emerged. We began with open (conceptual) coding of field note observations (e.g. security and safety professionals' interactions with each other and other risk duty-holders) and transcribed conversations (e.g. discussions from follow-up interviews), identifying early concepts and organising them into initial categories. Because participants used diverse terminology to articulate risk concerns, we applied a combination of *in vivo* codes (participants' own language) and descriptive codes (researcher-generated labels of participants' interactions) to generate first-order codes that represented granularly how risk management duty-holders perceived and communicated about risk. We then linked theoretically related first-order codes into higher-order conceptual categories (second-order codes) and clustered these into aggregate dimensions (O'Reilly *et al.*, 2012) to build a theoretically coherent framework. In this study, aggregate dimensions represent distinct cognitions and behaviours that shape risk communication and resource negotiation, and their interrelationships indicate whether interactions tend toward contention or concession. Throughout the analysis, we continued to collect further relevant data to exploit the phenomenon of interest and theorise in richer detail – a process referred to as theoretical sampling (O'Reilly *et al.*, 2012). Each round of new data were then compared to previously coded data (i.e. constant comparison) to see if any codes should be refined. More specifically, theoretical sampling of additional personnel interactions at relevant planning

meetings and follow-up interviews (Corley and Gioia, 2004) allowed us to identify and revise themes and aggregate dimensions reflected in ongoing collection of documented field observations and transcribed participant accounts. As such, the analytic process was highly recursive and continued until theoretical saturation – when no new theoretically relevant insights emerged. Throughout, we took a pseudo-interpretivist stance, remaining primarily inductive while situating the emerging framework in prior research and theory.

Results

Across both events, ABR and SCMF, security and safety planning involved a wide array of duty-holders spanning law enforcement, emergency management, event production, private medical providers and volunteer staff. Although “security” (intentional human-caused harm) and “safety” (accidental harm) are conceptually distinct, in practice they were deeply intertwined: conversations about risk, and requests to mobilise resources, frequently bridged both domains and sometimes brought them into tension.

Risk frames: how duty-holders view risk

Risk is often conceptualised as an estimated probability of harm based on available information about threats, vulnerabilities to valued assets and the consequences of potential damage (Cox, 2008). In practice, however, risk perceptions are rarely the product of formal analysis. Instead, they emerge from individual’s cognitions – shaped by their roles, experiences and situational priorities. Our observations at ABR and SCMF indicate that unless risk analyses are conducted collaboratively, security and safety personnel often construct different mental models of risk, leading them to prioritise different threats and vulnerabilities. We refer to these interpretive lenses as *risk frames* (Whittle *et al.*, 2023). These frames reflect how individuals evaluate particular threats, identify vulnerabilities and anticipate consequences. Through interactions, participants frequently referenced information, priorities or assumptions that informed their own or others’ risk frames.

Threat frames: historical and anticipatory orientations. Participants tended to prioritise threats in two ways: by drawing from historical incidents (*historical frames*) or by anticipating rare or unprecedented events (*anticipatory frames*). At SCMF, stakeholders often referenced recurring incidents or salient past crises. As the county Emergency Management Agency (EMA) director noted regarding SCMF,

There’s a lot that goes into it, and we want to be prepared for anything, but if I’m being honest, if it’ll be anything like previous years, we’ll mostly be dealing with drunk idiots getting rowdy or passing out. (Interview #9, Field Note #8).

Further, the EMA director and SCMF security and safety director repeatedly invoked a contentious weather-related evacuation from the prior year, describing it as a formative mistake they were determined not to repeat. From the SCMF security and safety director’s perspective, the storm response and resulting professional interaction were incidents he had no desire of repeating,

That last big storm was a mess. [EMA director] and me, we got into a huge fight. What he did, it was not part of the plan, and the attendees and festival paid for it. I blew up at him. I don’t want that happening again (Interview #4, Field Note #3).

The SCMF security and safety director further foregrounded prior aggression and weapon-related arrests, anchoring his risk assessments in past experiences, stating,

We caught some guy last year being rowdy near the camping area and scaring people. He was on drugs, and I think he had a weapon on him or something. It could’ve been really bad. Dude, I don’t think I would have even caught him if I didn’t take the countersurveillance training, but I’m always seeing stuff now (Interview #11, Field Note #8).

In slight contrast, the SCMF owner adopted a more anticipatory stance by emphasising risks associated with a younger, more demographically homogenous attendee base. The SCMF owner's concerns focused less on crowd aggression and more on emerging social risks that were plausible given shifting festival demographics,

One of the biggest things we should look out for is that a lot of this crowd isn't going to be drinking that much like in previous years. It's probably because of the artists we're bringing in, but they're super young and super female. Like mostly Gen Z. For a lot of them, this is going to be their first festival. A lot of them are going to be naïve, away from their parents for the first time, and really overstimulated with everything going on. I think we're going to see things like substance overdoses, and then with the camping, we need to protect from sexual assault (Meeting #2, Field Note #1).

Similarly, at ABR, law enforcement emphasised predictable, recurring hazards: lagging cyclists and off-route drivers. These were widely recognised as credible, routine concerns. The tone shifted, however, when the EMA director raised low-frequency, high-impact scenarios such as targeted violence or natural disasters: *What's our plan in this town for mass casualty incident? Do we think we're prepared* (Meeting #3, Field Note #3)? Others, such as the ABR event organisers, who viewed these threats as infrequent, remained silent until the ABR director asserted, *We will be fine. If we follow the original plan I created, we will be fine* (Meeting #3, Field Note #3). Later that same afternoon, a tornado struck a neighbouring town along the ABR route. For many townspeople and first responders, this event quickly became a new historical anchor used to justify increased preparedness since they suddenly had to learn how to divide resources across jurisdictions (Training session #5, Field Note #6).

In sum, these examples show how *historical frames* and *anticipatory frames* led stakeholders to privilege different types of threats – shaping what was perceived as likely, urgent or worthy of action. Stakeholders approached risk through distinct risk frames shaped by their roles, experiences and priorities, leading them to emphasise different threats and vulnerabilities. Some relied on *historical frames*, prioritising recurring or past incidents, while others used *anticipatory frames* to focus on rare or emerging risks. These differing orientations shaped which threats were viewed as credible or urgent – and sometimes led to misalignment in planning and preparedness.

Vulnerability frames: personal, social and organisational concerns. Stakeholders also differ in how they define vulnerabilities – what they believe most needed protection. These vulnerability frames ranged across personal, social and organisational concerns. At SCMF, the festival owner and festival director frequently referenced ticket (*organisational frame*) and employee enjoyment (*social frame*) – concerns closely tied to financial and reputational risk (Field Note #1). However, in a later tour of the festival grounds, the SCMF security and safety director mentioned, *It is their job to put on a great, fun event, and I want that too, but as the security and safety director, I am working hard to keep everyone safe from bad actors* (Interview #11, Field Note #8). This emphasis on protecting attendees from “bad actors” is a perspective informed by his military background and training. Others described him as more attuned to security threats than to incidental safety risks such as weather or infrastructure (Interview #5, Field Note #3). The county EMA director's framing blended social and personal responsibility. He repeatedly grounded decisions in his duty to safeguard public safety and maintain professional integrity: *I want to do things right and keep people safe. We can all be a bit difficult sometimes, but we have to take this stuff seriously. It's our job* (Interview #2, Field Note #1). In a later conversation, the EMA director explicitly noted how his socially oriented vulnerability frames differed from the SCMF security and safety director's vulnerability frames:

[The SCMF security and safety director] needed to make a quick decision. When the weather is bad, people need to know where we should go, whether the festival is gonna happen, and what we're gonna do to. I was like, I know there's a lot on the line, and he wants to keep his bosses happy. No one wants the festival to stop. If we don't do something though, it's a bad look for the festival. But once it really starts storming, it is my responsibility to initiate an evacuation plan and help everyone get out ok (Interview #5, Field Note #3).

In sum, people differed not only in what *level* of vulnerability they prioritised – personal, social, organisational – but also in how they construed vulnerabilities within each level (e.g. attendee safety vs attendee enjoyment vs organisational reputation).

Representational gaps: interpersonal consequences of risk frame (in)congruence. Across discussions of violence and safety risks, it became clear that stakeholders' differing risk frames created *representational gaps* – misalignments in how they understood risk-related problems (Cronin and Weingart, 2007). When stakeholders shared similar threat orientations, conversations progressed smoothly. For example, when participants collectively viewed threats as recurring or likely, they quickly aligned on mitigation strategies. Conversely, when stakeholders diverged – such as when the EMA director raised mass casualty concerns at ABR (Meeting #3, Field Note #3) or when fire and rescue personnel challenged the SCMF security and safety director's emphasis on security over safety (Interview #13, Field Note #9) – concerns were dismissed, overridden or redirected. Such moments often resulted in unresolved planning around certain threat vectors, leaving individual actors either to address the issue unilaterally or to abandon it entirely.

Vulnerability-frame incongruence produced similar dynamics. The SCMF security and safety director occasionally alluded to difficulties justifying security-related resources requests to leadership more concerned with attendee experience and festival reputation. The SCMF security and safety director, on a daily venue sweep prior to the festival weekend, shared that early in their working relationship, other SCMF leadership who were more focused on the attendee experience and festival reputation viewed these sweeps as frivolous:

I told them what I was doing, and they said, 'You're spending your time doing this?' But they don't appreciate it until something comes up—like the recent incident where this guy parked and left his car near the campgrounds. He's roaming around somewhere, but we haven't been able to find him yet. We don't know who he is or what he's capable of. He could easily find his way into the venue or camping area and hide somewhere. The festival is in one week. What if he hurts someone? So, it's when stuff like that comes up that they tell me they're grateful (Interview #11, Field Note #8).

In contrast, when vulnerability frames aligned then agreement emerged quickly. For example, once the county EMA director suggested encouraging attendees to use buses instead of ridesharing pickups at the festival entrance to lessen the risk of traffic buildup and pedestrian harm, all SCMF personnel agreed that the new strategy would streamline festival operations, alleviating both social (attendee safety, satisfaction) and organisational (operational continuity) concerns (Field Note #11).

In sum, our observations indicate that divergent risk frames – across both threats and vulnerabilities – produce representational gaps that impede collaborative risk management. These gaps shape which risks are taken seriously, which are marginalised and which actors ultimately bear responsibility for mitigation. In the subsequent sections, we examine how stakeholders attempt to navigate or overcome these gaps when communicating risk concerns and seeking resources.

Risk communication approaches: strategies for garnering risk management support

Event planning and production occurs with fixed budgets that leave little flexibility to address emerging risks (Ballou et al., 2000; Knardal and Petterson, 2015). As a result, stakeholders' risk-related discussions typically progressed from identifying a concern to seeking collaborative support for mitigation, most often through requests to acquire or mobilise scarce resources. Because security and safety roles are interdependent, effective coordination requires clear communication about needs, decisions and actions to prevent one function's mitigation efforts from undermining another's. Our observations revealed several recurring risk communication approaches, each involving negotiations over whose resources would be used, whose work goals would be affected, and the rhetorical strategies stakeholders employed to legitimise their concerns or leverage social relationships.

Means-ends proposition. Participants' requests for collaboration or resources fell into four distinct types, each involving potential costs to the receiver's resources (means) or ability to achieve their own objectives (ends). First, actors sometimes requested to use their *own* resources in ways that could interfere with others' work. For example, state law enforcement at ABR proposed keeping patrol vehicles off the route to reduce risks to cyclists, even though doing so could limit medical and law-enforcement response proximity, which were key priorities for event organisers (Meeting #5, Field Note #7); similarly, a town mayor sought approval to develop a standalone town emergency plan for ABR, knowing it would require revisions to the county's broader plan (Field Note #8). Second, some requests involved obtaining *others'* resources with minimal impact on the provider's goals. In one instance, the county EMA intern requested utility task vehicles (UTVs) for vulnerability assessments, a need that did not impede SCMF security operations if completed in the agreed upon time frame,

EMA intern: Hey, could we borrow one of the UTVs to scope out the venue? We can give it back to the volunteers or staff whenever you need.

SCMF security and safety director: Yeah, just give it back around lunch before we open the grounds. We're gonna need it (Field Note #11).

Third, certain requests would directly constrain the other party's capacity to meet its own standards, as seen when logistical- or safety-related demands required reallocating security or volunteer personnel and thereby weakening security posture (Field Notes #8 and #11). Fourth, some requests offered clear mutual benefit. For instance, EMA personnel asked NWS staff to measure on-site temperatures at SCMF, generating shared data that supported both agencies' heat-risk mitigation efforts,

EMA director: Let's check out how hot it is down by the "bowl". I'm already sweating up here, so it's gotta be like twenty degrees hotter down there. You got your thermometer?

NWS staff: Yep. Let's go.

EMA intern: They haven't been letting people bring outside waters in. If it's that hot, we might want to try to hand some out to the people down there because there are only five water stations (Field Note #11).

Such variations in means-ends communications reflected how stakeholders balanced the costs and advantages of risk mitigation across specialized, yet interdependent roles.

Influence tactics. As participants sought material or functional support for risk mitigation, they paired their means-end propositions with *prescriptive* and *relational* influence tactics. Prescriptive tactics drew on authority, expertise or analytic reasoning to justify why others should accept a proposed action or allocate resources. However, these tactics alone were often met with resistance, as illustrated by recurrent tension between the SCMF security and safety director and the EMA director. During one meeting during SCMF, the SCMF security and safety director sought to centralise operations:

It is a disaster right now. Lines are taking forever. It is balls-hot out. People are walking into traffic. Where are our front-of-house guys? I want all UTVs back and accounted for. Starting now, everything goes through me. This is not okay (Meeting #11, Field Note #11).

Prescriptive appeals grounded in data and logic were sometimes effective. For instance, state law enforcement used such reasoning to negotiate changes to signage and traffic flow with front-of-house security,

We got a line of cars all the way to the highway. If we can get people coming in the same way and finding their parking area instead of turning around and causing traffic, things would move much quicker (Meeting #9, Field Note #11).

Relational tactics, by contrast, relied on social norms, shared concerns or emotional appeals. These were especially useful when data alone did not shift decision-making. At SCMF, describing high temperatures at the concert area failed to produce action, but emphasising attendee frustration and negative social media reactions prompted leadership to allow filled water bottles and outside water. Along this vein, an EMA staff member urged to the group, *We have to change things, like, yesterday. It is a mess out there, not safe at all. Have you seen what people are saying on social media* (Field Note #11)? In sum, participants used both prescriptive (authority-, expertise- or data-based) and relational (social- or emotion-based) influence tactics to secure support for risk mitigation, with relational appeals often proving more effective when prescriptive arguments met resistance.

Resourcing decision calculus: how receivers evaluate risk concerns and mitigative action

When stakeholders presented risk concerns to key resource holders, those on the receiving end evaluated these requests by considering both the significance of the issue and whether available resources could effectively mitigate it. Their reasoning aligned with expectancy theories of motivation (Vroom, 1964), in which those in receipt of resource requests would cognitively process a valuation of the risk, the instrumentality of proposed means of addressing that risk and their perception of mitigation feasibility based on the available resources.

Issue credibility: assessing threat likelihood and impact. When evaluating risk concerns, receivers assessed two primary criteria: (1) threat likelihood, the probability that an incident might occur and (2) impact, the severity of harm to people, operations or valued assets. These judgments were strongly shaped by individuals' existing risk frames. Likelihood assessments were often expressed through historical frames. For example, a mobile emergency medical representative responded to state and county law enforcement's concerns about inexperienced and elderly cyclists lagging behind in the heat, *Right, heat exhaustion is the biggest issue, always has been at ABR* (Meeting #5, Field Note #7). Another emergency medical service worker for SCMF noted,

It's gonna get real hot. Just like last year. If this is anything like the year before, I bet I'll be seeing folks down there in rough shape in a few hours (Interview #15, Field Note #11).

In other instances, anticipatory terms were used to assess threat likelihood. When asked by the SCMF security and safety director to conduct a sweep of portable restrooms on the festival grounds, the EMA director concurred,

It's not glamorous, but it's always good to look just in case. Especially here, the bathrooms are out on the edge where people can pull some sketchy stuff. Can you guys help me out? You never know what weird shit you'd find in there. Always something new. Could be dirty underwear, could be a bomb (Field Note #11).

Impact assessments reflected stakeholders' vulnerability frames. For example, disagreement between the SCMF security and safety director and a local firefighter over water distribution highlighted competing social and organisational concerns: the director worried this would scare [nearby attendees] into thinking there was an emergency incident (Interview #13, Field Note #9), whereas the firefighter emphasised attendee safety as a prerequisite for enjoyment and reputational protection: *Well guess what? People were literally passing out from the heat. You can't have fun when you're sick from heat and dehydrated. That can't be good for business* (Interview #13, Field Note #9). In contrast, concerns about perimeter breaches raised by an EMA junior representative aligned closely with the security team's priorities and were quickly validated (Field Note #11). Together, these examples demonstrate how issue credibility depended on whether raised risks resonated with receivers' internalised views of what was likely and what mattered most.

In sum, receivers judged risk concerns based on *threat likelihood* and *impact*, with both criteria shaped by their existing risk frames. Likelihood assessments drew on either historical

patterns (e.g. recurring heat exhaustion at ABR) or anticipatory reasoning (e.g. potential hazards in SCMF restrooms). Impact assessments reflected vulnerability priorities, as seen in disagreements over water distribution at SCMF, demonstrating that issue credibility hinged on whether a concern aligned with what receivers viewed as both plausible and consequential.

Mitigation feasibility: demands-resources assessment. Credible risks were acted upon only when proposed solutions were viewed as feasible, with receivers weighing the urgency and scope of the request against available personnel, time and logistical capacity. For example, when informed of toppled fencing, the SCMF security and safety lead affirmed the likelihood of an undesirable incident,

Someone outside without a ticket could sneak in, like that guy near the festival grounds the other week we haven't found yet. I can get a security guy or volunteer on it (Meeting #10, Field Note #11).

He then contacted SCMF's front-of-house security lead, who approved repairs to temporary perimeter fencing because staff were available before the festival opened, making the fix manageable: *We got it. Yeah, we have a few guys outside of ticket check who can do that. It's not crowded yet* (Interview #16, Field Note #11). Later, as high temperatures caused widespread attendee distress near the stage, the EMA director and SCMF security and safety director urged the SCMF owner to make adjustments to water policies; in light of escalating safety concerns and growing social media criticism, the festival owner deemed expanded water distribution feasible and authorised free water for attendees (Meeting #11, Field Note #11). In sum, receivers acted on credible risks when the mitigation appeared feasible.

Contestation

Scepticism about a risk's credibility or the feasibility of proposed mitigation often led stakeholders to contest requests or action plans (i.e. means-ends rebuttals). For example, when the county EMA intern raised concerns about propane tanks stored near SCMF's VIP entrance, a security team member dismissed the request to relocate them, arguing that the incident was unlikely and that personnel were needed elsewhere, indicating that the perceived costs outweighed the benefits,

EMA intern: Um, we saw some propane tanks by the VIP entrance. I don't know if they're supposed to be there. They're like, really close. I think it could be a hazard.

SCMF security and safety director: Those are supposed to be there. And it's the VIP entrance. Barely anyone is there right now. No one around is going to mess with those. Who cares? I am not wasting my time and bothering my guys for that.

EMA intern: Well, ok. We also saw some fences that were knocked over near the ADA area and by the trail coming from the camping area.

SCMF security and safety director: Ok yeah. That's the kind of thing I actually need to know (Meeting #10, Field Note #11).

In another case, the EMA director and SCMF security and safety director clashed over weather-related evacuation decisions from a prior festival, with the latter resisting the EMA director's attempt to assert authority because it conflicted with his preferred course of action (Interviews #1 and #11, Field Notes #1 and #8). Across such interactions, means-ends rebuttals frequently invoked prescriptive rationales – claims of expertise, authority or limited jurisdiction (i.e. counter-influence tactics) – to justify rejecting others' proposals. Ultimately, contestation arose when representational gaps led duty-holders to disagree about what constituted a meaningful risk and whether the proposed means were justified to achieve the desired ends. In sum, contestation arose when representational gaps led duty-holders to disagree about what constituted a meaningful risk and whether the proposed means were justified to achieve the desired ends.

Resourcing determination

Regardless of whether contestation occurred, receivers of risk-related requests arrived at one of three resourcing determinations. First, they could fully approve or deny the proposal in full – either permitting the requester to use their own resources or granting (or refusing) access to the receiver’s resources. Some requests were accepted without dispute (e.g. repairing SCMF perimeter fencing [Field Note #11]; coordinating medical and law-enforcement support for lagging ABR riders [Meeting #5, Field Note #7]), whereas others were fully rejected (e.g. relocating propane tanks [Field Note #11]; deploying firefighters to distribute water [Interview #13, Field Note #9]). Second, decisions could emerge through iterative negotiation, with stakeholders cycling through additional discussions before reaching agreement, as seen in SCMF’s evolving deliberations about water bottle allowances and water distribution,

EMA director: There aren’t enough water stations, and people aren’t gonna keep buying individual waters. We have to figure something out, like let them bring bottles in.

SCMF security and safety director: Yeah. I know. I talked to [festival owner] about this, and we are gonna let people bring outside waters in tomorrow. Right now we are just giving them out for free (Meeting #11, Field Note #11).

Third, when unable to provide direct support, receivers sometimes issued referrals to alternative resource holders – such as the EMA director pointing the SCMF security and safety director to federal counter-surveillance training opportunities (Training session #1, Field Note #3) or advising EMA personnel to request UTVs from credentialed festival volunteers (Field Note #11). In sum, receivers of risk-related requests arrived at one of three outcomes – full approval or denial, iterative negotiation or referral to alternative resource holders – depending on whether they viewed the proposed action as appropriate, feasible or better supported elsewhere.

Discussion

Our analysis describes foundational factors that influence how security and safety stakeholders view risk, how congruence or incongruence in risk perceptions (and priorities) influence risk conversations and resource mobilisation decisions, and what may be done to facilitate efficient, productive conversation about protecting human assets from harm. The theoretical risk communication and resource negotiation framework is depicted in [Figure 1](#), whereas the data structure for the first-order coded concepts, second-order themes and aggregate dimensions is shown in [Figure 2](#).

Our empirically derived framework addresses several explanatory limitations of prior research and theory. First, while representational gaps theory ([Cronin and Weingart, 2007](#); [Firth et al., 2015](#)) has great utility for generally explaining misunderstandings and conflict in intrateam or interteam collaborative contexts, our theoretical framework describes more precisely how and why security and safety professionals may perceive (and approach) different aspects of risk differently. That is, instead of simply explaining that perceptual differences could produce disagreements about risk and risk managements, we also sought to delineate the *type* of risk elements that may differ (e.g. historical and proactive threat orientations, vulnerability referents). Along this vein, we observed that people often adopt generalised (i.e. enduring) and momentary (i.e. holding one’s attention at a given time) cognitive risk frames, or lenses through which they conceive of threat and vulnerability concerns. These can stem from historical information from their professional backgrounds, operating norms or formative experiences, as well as anxieties about unanticipated or unprecedented incidents. Incongruence in individuals’ orientations towards threats or vulnerabilities – and perceptions of which risk mitigating objectives and means are appropriate or feasible – during a given interaction can lead receivers of risk concerns to dismiss or contest critical issues that are raised through determination that those risks are

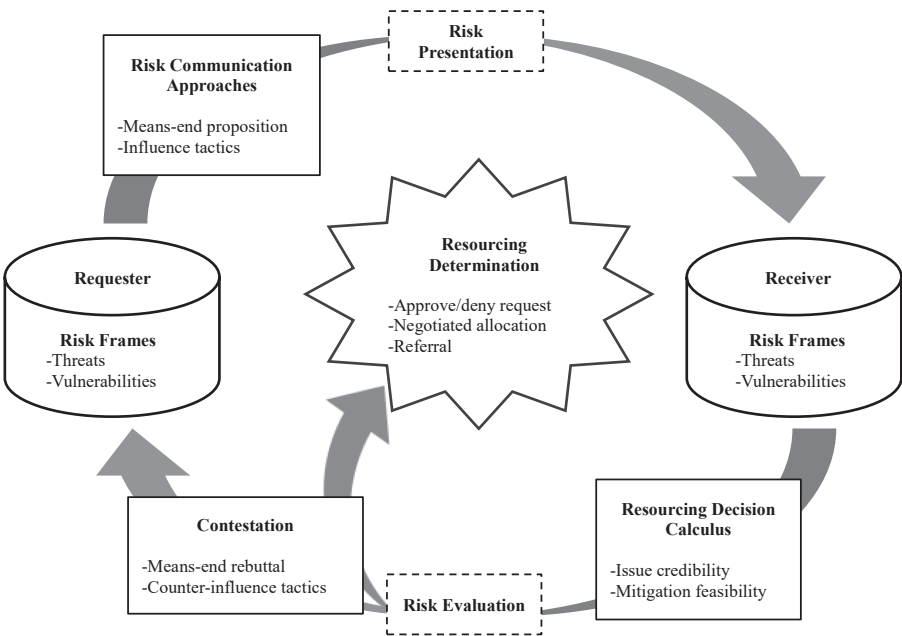


Figure 1. Grounded model of the risk communication and resource negotiation process. *Note.* Dashed-line boxes (e.g. risk presentation, risk evaluation) represent overall process steps, whereas shapes with solid outlines denote aggregate dimensions and themes

unlikely or innocuous. Further, even if agreement is reached regarding security and safety risks, risk management activities for which resources and support cannot be provided may also be dismissed or deprioritised. Another critical finding from our research is that interdisciplinary risk communication, due to the resource and operational interdependence of collaborating agencies (e.g. enacting a risk management activity like borrowing UTVs to deliver water and medical care to heat-affected attendees), frequently requires difficult discussion and negotiation of risk management ends and means, even when plans exist and specialised roles are otherwise well-defined between agencies. From the perspective of those requesting support for risk mitigation, this finding raises a practical imperative for facilitating efficient and effective risk communication: that is, it is vital to (a) develop the self-awareness to understand one's own orientation toward certain threats or vulnerabilities, (b) recognise how it aligns with that of other security and safety duty-holders and (c) understand not only what the division of labour is but also how one agency's activities affect the outcomes, operations and resources of others. To illustrate, a practitioner highly focused on security concerns must recognise when and why other risk management duty-holders may deprioritise security in favour of safety concerns in a given moment. As another example, decisions to alter traffic flow have downstream consequences for security, volunteers, event staff, shuttle drivers and may require updates to physical markers and signage. Left uncommunicated or without shared understanding of how such choices have widespread influences on operations and resources, conflict may arise or security and safety posture may be compromised. Without this awareness, it becomes challenging to converse productively about risk because people may disagree foundationally about what is deemed essential risk.

Second, unlike predominant risk communication models that describe one- and two-way communications between risk managers and the public (Clubb and Hinkle, 2015; Ping *et al.*, 2016), we developed our framework for risk communications in interdisciplinary security and safety partnerships. In doing so, we identified several strategies that event security and safety

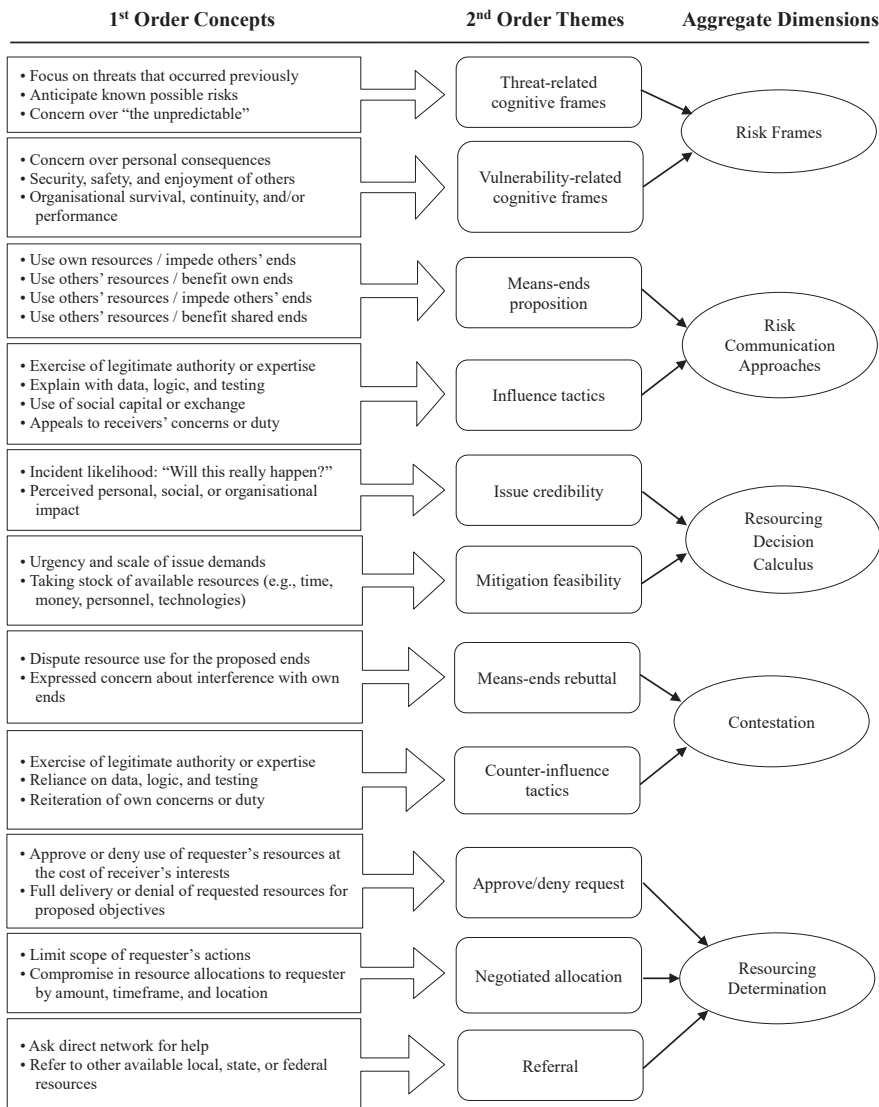


Figure 2. Data structure

personnel used to “package” their risk concerns and convince risk managers in other domains to support their cause. These strategies involved framing the ask through means-ends propositions and employing a variety of influence tactics to build credibility. Means-ends propositions, in short, represent different types of requests that specify *whose* (the requester or receiver) means or resources are proposed to meet *whose* (again, the requester or receiver) valued ends. This component of our model is especially useful, as it accommodates the possibility that risk management actions rely on shared resources and/or affect the outcomes of other entities. Accompanying influence tactics may include legitimacy-based strategies such as exerting one’s authority, emphasising one’s expertise or relying on data and logic to build case for collaborative use of resources for risk mitigation. Alternatively, others have found

success using relationship-based strategies such as use of social capital (i.e. status), social exchange (i.e. I supported you before, now you support me) or appeals to the receiver's main risk management concerns (e.g. arguing that using their resources to mitigate an identified risk would be mutually beneficial for both parties given their shared values).

Altogether, our research explains how and why risk perceptions may differ among security and safety personnel and offers insights into several actionable areas (e.g. recognition of own and others' cognitive risk frames, ways to package requests, strategies for persuading others that risks are nontrivial) for security and safety personnel to approach their collaborative risk management conversations with intention and tact. Our framework for interdisciplinary risk communication within event security and safety offers a fresh perspective on risk management that cannot be solely explained by representational gaps theory or traditional models of risk communication.

Conclusion

Limitations and future directions

As is true with any research, this study is not without its limitations. First, grounded theory allows us to inductively derive "portable principles" (i.e. concepts and models that can be applied in comparable contexts) but does not allow us to infer causality (Gioia *et al.*, 2013). While our approach has utility for identifying and outlining the many cognitive and behavioural factors that influence the interdisciplinary risk communication process, we cannot empirically test the relative effects of these factors. For example, only quantitative methods can allow us to test precisely which incongruences in cognitive risk frames produce the most contentious conversations or which combinations of risk communication strategies are best for alleviating conflict. Future research could address this limitation with the use of experimental, quasi-experimental or survey methods to better understand the underlying mechanisms identified in the present work. Second, our analysis was conducted at the interpersonal/conversational level, which neglects other components of the overall event security enterprise such as the collaboration structure (e.g. role division, hierarchy, communication channels and technology) or the dynamics of collective resources mobilisation for risk management. Future research could examine how such interactions scale – that is, how they influence outcomes at the security/safety unit or event level. For example, how does failure to convey risk and acquire resources for heat safety influence outcomes such as media attention, year-over-year attendance or financial outcomes of such events, reported enjoyment from attendees, etc. Third, the two event sites in the present study are geographically co-located and thus, there may be context- or culture-based nuances in planning interactions and event production. Future research could address this limitation by exploring communications in other event contexts (e.g. stadiums, parades) and geographic locations, such as urban or coastal areas, and in countries with more centralised security and law enforcement.

Implications

Through a modified grounded theory analysis, we inductively produced a model of risk communication and resource negotiation in the context of event security and safety that has four main takeaways for practitioners. First, event security is multidisciplinary. Security and safety professionals' professional backgrounds and experiences with critical incidents shape how they view security and safety risks. Second, conflict in security planning and implementation can arise when security professionals differ in concerns over threats and vulnerabilities (i.e. *cognitive risk frames*), as well as appropriate means of managing such risks. We refer to such differences in risk perceptions and management approaches as *representational gaps*. Third, security professionals can request – and negotiate, if contested – security and safety resources from others by appealing to others' risk frames and using other social influence tactics. Knowing how others view risk can facilitate constructive

interdisciplinary conversations about risk and resourcing to achieve critical functions central for event security. Failure to get on the same page about threat and hazard risks can reduce (a) efficiency and (b) effectiveness of risk mitigation decisions. Fourth, receivers of resourcing requests use multiple criteria to determine the credibility of threats and feasibility of mitigation before deciding whether and how resources should be shared and/or used.

Acknowledgments

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Note

1. In addition to these two focal events, we also incidentally observed risk communication and resourcing interactions by personnel involved with these events (e.g. emergency management, county law enforcement) during an unexpected tornado disaster that struck a town within the neighbouring county. The disjointed multijurisdictional response to this emergency incident notably shaped future event planning conversations about risk preparedness. Thus, given that (a) this incident concerned issues of human safety and risk, (b) the overlap between personnel responding to the disaster and personnel working to secure the two events of interest and (c) responses to this event directly (and explicitly) informed future security and safety planning interactions, we retained participants' references to this mass casualty incident in our analysis.

References

- Austin, L.C., Kovacs, D.C., Thorne, S. and Moody, J.R. (2020), "Using grounded theory and mental modeling to understand influences on electricians' safety decisions: toward an integrated theory of why electricians work energized", *Safety Science*, Vol. 130, 104826, doi: [10.1016/j.ssci.2020.104826](https://doi.org/10.1016/j.ssci.2020.104826).
- Babicky, P. and Seebauer, S. (2019), "Unpacking Protection Motivation Theory: evidence for a separate protective and non-protective route in private flood mitigation behavior", *Journal of Risk Research*, Vol. 22 No. 12, pp. 1503-1521, doi: [10.1080/13669877.2018.1485175](https://doi.org/10.1080/13669877.2018.1485175).
- Ballou, B., Godwin, N.H. and Tilbury, V. (2000), "Riverfest: managing risk and measuring performance at little Rock's annual music and arts festival", *Issues in Accounting Education*, Vol. 15 No. 3, pp. 483-512, doi: [10.2308/iace.2000.15.3.483](https://doi.org/10.2308/iace.2000.15.3.483).
- Balog-Way, D., McComas, K. and Besley, J. (2020), "The evolving field of risk communication", *Risk Analysis*, Vol. 40 No. S1, pp. 2240-2262, doi: [10.1111/risa.13615](https://doi.org/10.1111/risa.13615).
- Barfod, T.S., Hecht, F.M., Rubow, C. and Gerstoft, J. (2006), "Physicians' communication with patients about adherence to HIV medication in San Francisco and Copenhagen: a qualitative study using Grounded Theory", *BMC Health Services Research*, Vol. 6 No. 1, p. 154, doi: [10.1186/1472-6963-6-154](https://doi.org/10.1186/1472-6963-6-154).
- Berchtold, C., Vollmer, M., Sendrowski, P., Neisser, F., Müller, L. and Grigoleit, S. (2020), "Barriers and facilitators in interorganizational disaster response: identifying examples across Europe", *International Journal of Disaster Risk Science*, Vol. 11 No. 1, pp. 46-58, doi: [10.1007/s13753-020-00249-y](https://doi.org/10.1007/s13753-020-00249-y).
- Bessette, D.L., Mayer, L.A., Cwik, B., Vezér, M., Keller, K., Lempert, R.J. and Tuana, N. (2017), "Building a values-informed mental model for New Orleans climate risk management", *Risk Analysis*, Vol. 37 No. 10, pp. 1993-2004, doi: [10.1111/risa.12743](https://doi.org/10.1111/risa.12743).
- Boyle, P., Clément, D. and Haggerty, K.D. (2015), "Iterations of olympic security: Montreal and vancouver", *Security Dialogue*, Vol. 46 No. 2, pp. 109-125, doi: [10.1177/0967010614543582](https://doi.org/10.1177/0967010614543582).
- Braun, V. and Clarke, V. (2014), "What can 'thematic analysis' offer health and wellbeing researchers?", *International Journal of Qualitative Studies on Health and Well-Being*, Vol. 9 No. 1, 26152, doi: [10.3402/qhw.v9.26152](https://doi.org/10.3402/qhw.v9.26152).

- Brien, B.O., Andrews, T. and Savage, E. (2019), "Nurses keeping patients safe by managing risk in perioperative settings: a classic grounded theory study", *Journal of Nursing Management*, Vol. 27 No. 7, pp. 1454-1461, doi: [10.1111/jonm.12829](https://doi.org/10.1111/jonm.12829).
- Brown, O., Power, N. and Conchie, S.M. (2021), "Communication and coordination across event phases: a multi-team system emergency response", *Journal of Occupational and Organizational Psychology*, Vol. 94 No. 3, pp. 591-615, doi: [10.1111/joop.12349](https://doi.org/10.1111/joop.12349).
- Charmaz, K. (2006), *Constructing Grounded Theory: A Practical Guide through Qualitative Analysis*, Sage.
- Clubb, A.C. and Hinkle, J.C. (2015), "Protection motivation theory as a theoretical framework for understanding the use of protective measures", *Criminal Justice Studies*, Vol. 28 No. 3, pp. 336-355, doi: [10.1080/1478601x.2015.1050590](https://doi.org/10.1080/1478601x.2015.1050590).
- Corley, K.G. and Gioia, D.A. (2004), "Identity ambiguity and change in the wake of a corporate spin-off", *Administrative Science Quarterly*, Vol. 49 No. 2, pp. 173-208, doi: [10.2307/4131471](https://doi.org/10.2307/4131471).
- Cox, J.L.A. (2008), "Some limitations of 'Risk = Threat × Vulnerability × consequence' for risk analysis of terrorist attacks", *Risk Analysis: An International Journal*, Vol. 28 No. 6, pp. 1749-1761.
- Cronin, M.A. and Weingart, L.R. (2007), "Representational gaps, information processing, and conflict in functionally diverse teams", *Academy of Management Review*, Vol. 32 No. 3, pp. 761-773, doi: [10.5465/amr.2007.25275511](https://doi.org/10.5465/amr.2007.25275511).
- Firth, B.M., Hollenbeck, J.R., Miles, J.E., Ilgen, D.R. and Barnes, C.M. (2015), "Same page, different books: extending representational gaps theory to enhance performance in multiteam systems", *Academy of Management Journal*, Vol. 58 No. 3, pp. 813-835, doi: [10.5465/amj.2013.0216](https://doi.org/10.5465/amj.2013.0216).
- Fussey, P. (2015), "Command, control and contestation: negotiating security at the London 2012 Olympics", *The Geographical Journal*, Vol. 181 No. 3, pp. 212-223, doi: [10.1111/geoj.12058](https://doi.org/10.1111/geoj.12058).
- Gioia, D. (2021), "A systematic methodology for doing qualitative research", *The Journal of Applied Behavioral Science*, Vol. 57 No. 1, pp. 20-29, doi: [10.1177/0021886320982715](https://doi.org/10.1177/0021886320982715).
- Gioia, D.A., Corley, K.G. and Hamilton, A.L. (2013), "Seeking qualitative rigor in inductive research: notes on the Gioia methodology", *Organizational Research Methods*, Vol. 16 No. 1, pp. 15-31, doi: [10.1177/1094428112452151](https://doi.org/10.1177/1094428112452151).
- Glaser, B. and Strauss, A. (2017), *Discovery of Grounded Theory: Strategies for Qualitative Research*, Routledge.
- Guan, B., Bao, G., Liu, Q. and Raymond, R.G. (2021), "Two-way risk communication, public value consensus, and citizens' policy compliance willingness about COVID-19: multilevel analysis based on a nudge view", *Administration and Society*, Vol. 53 No. 7, pp. 1106-1149, doi: [10.1177/0095399721990332](https://doi.org/10.1177/0095399721990332).
- Hall, S., McGee, J.M. and Cooper, W.E. (2022), *Security and Risk Assessment for Facility and Event Managers*, Human Kinetics.
- Höppner, C., Whittle, R., Bründl, M. and Buchecker, M. (2012), "Linking social capacities and risk communication in Europe: a gap between theory and practice?", *Natural Hazards*, Vol. 64 No. 2, pp. 1753-1778, doi: [10.1007/s11069-012-0356-5](https://doi.org/10.1007/s11069-012-0356-5).
- Knardal, P.S. and Pettersen, I.J. (2015), "Creativity and management control—the diversity of festival budgets", *International Journal of Managing Projects in Business*, Vol. 8 No. 4, pp. 679-695, doi: [10.1108/ijmpb-11-2014-0082](https://doi.org/10.1108/ijmpb-11-2014-0082).
- Lanaj, K., Hollenbeck, J.R., Ilgen, D.R., Barnes, C.M. and Harmon, S.J. (2013), "The double-edged sword of decentralized planning in multiteam systems", *Academy of Management Journal*, Vol. 56 No. 3, pp. 735-757, doi: [10.5465/amj.2011.0350](https://doi.org/10.5465/amj.2011.0350).
- Lazrus, H., Morss, R.E., Demuth, J.L., Lazo, J.K. and Bostrom, A. (2016), "Know what to do if you encounter a flash flood': mental models analysis for improving flash flood risk communication and public decision making", *Risk Analysis*, Vol. 36 No. 2, pp. 411-427, doi: [10.1111/risa.12480](https://doi.org/10.1111/risa.12480).

-
- Leopkey, B. and Parent, M.M. (2009), "Risk management strategies by stakeholders in Canadian major sporting events", *Event Management*, Vol. 13 No. 3, pp. 153-170, doi: [10.3727/152599509790029828](https://doi.org/10.3727/152599509790029828).
- Lincoln, Y.S. and Guba, E.G. (1985), *Naturalistic Inquiry*, Vol. 75, Sage.
- Majchrzak, A., Jarvenpaa, S.L. and Hollingshead, A.B. (2007), "Coordinating expertise among emergent groups responding to disasters", *Organization Science*, Vol. 18 No. 1, pp. 147-161, doi: [10.1287/orsc.1060.0228](https://doi.org/10.1287/orsc.1060.0228).
- March, J.G. (1978), "Bounded rationality, ambiguity, and the engineering of choice", *The Bell Journal of Economics*, Vol. 9 No. 2, pp. 587-608, doi: [10.2307/3003600](https://doi.org/10.2307/3003600).
- Martland, J., Chamberlain, D., Hutton, A. and Smigielski, M. (2016), "Communication and general concern criterion prior to activation of the rapid response team: a grounded theory", *Australian Health Review*, Vol. 40 No. 5, pp. 477-483, doi: [10.1071/ah15123](https://doi.org/10.1071/ah15123).
- Naeem, M., Ozuem, W., Howell, K. and Ranfagni, S. (2023), "A step-by-step process of thematic analysis to develop a conceptual model in qualitative research", *International Journal of Qualitative Methods*, Vol. 22, doi: [10.1177/16094069231205789](https://doi.org/10.1177/16094069231205789).
- O'Reilly, K., Paper, D. and Marx, S. (2012), "Demystifying grounded theory for business research", *Organizational Research Methods*, Vol. 15 No. 2, pp. 247-262, doi: [10.1177/1094428111434559](https://doi.org/10.1177/1094428111434559).
- Phillippi, J. and Lauderdale, J. (2018), "A guide to field notes for qualitative research: context and conversation", *Qualitative Health Research*, Vol. 28 No. 3, pp. 381-388, doi: [10.1177/1049732317697102](https://doi.org/10.1177/1049732317697102).
- Ping, N.S., Wehn, U., Zevenbergen, C. and Van Der Zaag, P. (2016), "Towards two-way flood risk communication: current practice in a community in the UK", *Journal of Water and Climate Change*, Vol. 7 No. 4, pp. 651-664, doi: [10.2166/wcc.2016.015](https://doi.org/10.2166/wcc.2016.015).
- Power, N., Alcock, J., Philpot, R. and Levine, M. (2024), "The psychology of interoperability: a systematic review of joint working between the UK emergency services", *Journal of Occupational and Organizational Psychology*, Vol. 97 No. 1, pp. 233-252, doi: [10.1111/joop.12469](https://doi.org/10.1111/joop.12469).
- Power, N., Betts, C., Philpot, R. and Levine, M. (2025), "Enhancing interoperability team training: insights from the UK emergency services", *International Journal of Emergency Services*, Vol. 14 No. 2, pp. 123-133, doi: [10.1108/IJES-10-2024-0063](https://doi.org/10.1108/IJES-10-2024-0063).
- Regan, Á., Raats, M., Shan, L.C., Wall, P.G. and McConnon, Á. (2016), "Risk communication and social media during food safety crises: a study of stakeholders' opinions in Ireland", *Journal of Risk Research*, Vol. 19 No. 1, pp. 119-133, doi: [10.1080/13669877.2014.961517](https://doi.org/10.1080/13669877.2014.961517).
- Rogers, R.W. (1975), "A protection motivation theory of fear appeals and attitude change", *The Journal of Psychology*, Vol. 91 No. 1, pp. 93-114, doi: [10.1080/00223980.1975.9915803](https://doi.org/10.1080/00223980.1975.9915803).
- Schütte, P.M. and Willmes, S.U. (2022), "Production of event security in Germany—empirical findings on perceptions of interorganisational collaboration between various security actors", *International Journal of Event and Festival Management*, Vol. 3 No. 4, pp. 457-471, doi: [10.1108/IJEFM-11-2021-0092](https://doi.org/10.1108/IJEFM-11-2021-0092).
- Silvers, J.R. (2009), *Risk Management for Meetings and Events*, Routledge.
- Spaaij, R. and Hamm, M.S. (2015), "Key issues and research agendas in lone wolf terrorism", *Studies in Conflict and Terrorism*, Vol. 38 No. 3, pp. 167-178, doi: [10.1080/1057610X.2015.1076695](https://doi.org/10.1080/1057610X.2015.1076695).
- Sterman, J.D. (2008), "Risk communication on climate: mental models and mass balance", *Science*, Vol. 322 No. 5901, pp. 532-533, doi: [10.1126/science.1162574](https://doi.org/10.1126/science.1162574).
- Triana, M.D.C., Kim, K., Byun, S.Y., Delgado, D.M. and Arthur, W., Jr (2021), "The relationship between team deep-level diversity and team performance: a meta-analysis of the main effect, moderators, and mediating mechanisms", *Journal of Management Studies*, Vol. 58 No. 8, pp. 2137-2179, doi: [10.1111/joms.12670](https://doi.org/10.1111/joms.12670).
- US House. Committee on Homeland Security (2025), "Lessons learned: an Examination of major security Incidents at mass gathering events: hearings before the US house. Hearing, 22 July",

- Van Winkle, C.M. and Kullman, S. (2022), "Remaking the festival business model during a pandemic", *Event Management*, Vol. 26 No. 6, pp. 1335-1350, doi: [10.3727/152599522x16419948390989](https://doi.org/10.3727/152599522x16419948390989).
- Vroom, V.H. (1964), *Work and Motivation*, Wiley, Oxford, England.
- Waring, S. (2019), "Using live disaster exercises to study large multiteam systems in extreme environments: methodological and measurement fit", *Organizational Psychology Review*, Vol. 9 No. 4, pp. 219-244, doi: [10.1177/2041386619892262](https://doi.org/10.1177/2041386619892262).
- Waring, S., Alison, L., Carter, G., Barrett-Pink, C., Humann, M., Swan, L. and Zilinsky, T. (2018), "Information sharing in interteam responses to disaster", *Journal of Occupational and Organizational Psychology*, Vol. 91 No. 3, pp. 591-619, doi: [10.1111/joop.12217](https://doi.org/10.1111/joop.12217).
- Whittle, A., Vaara, E. and Maitlis, S. (2023), "The role of language in organisational sensemaking: an integrative theoretical framework and an agenda for future research", *Journal of Management*, Vol. 49 No. 6, pp. 1807-1840, doi: [10.1177/01492063221147295](https://doi.org/10.1177/01492063221147295).
- Zekulin, M. (2009), "Olympic security: assessing the risk of terrorism at the 2010 vancouver winter games", *Journal of Military and Strategic Studies*, Vol. 12 No. 1, pp. 1-25.
- Ziegert, J.C., Knight, A.P., Resick, C.J. and Graham, K.A. (2022), "Addressing performance tensions in multiteam systems: balancing informal mechanisms of coordination within and between teams", *Academy of Management Journal*, Vol. 65 No. 1, pp. 158-185, doi: [10.5465/amj.2019.1043](https://doi.org/10.5465/amj.2019.1043).

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