



THE UNIVERSITY *of* EDINBURGH

Edinburgh Research Explorer

Effective strategies in emergencies

Citation for published version:

Templeton, A, Beamish Leskovcova, A, Clegg, GR, Lloyd, A, Fraser, E, Keyulong, S & Hinata, S 2023, *Effective strategies in emergencies: First responders' views on communicating and coordinating with the public*. <<https://osf.io/ct4de>>

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Document Version:

Publisher's PDF, also known as Version of record

General rights

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.



EFFECTIVE STRATEGIES IN EMERGENCIES: FIRST RESPONDERS' VIEWS ON COMMUNICATING AND COORDINATING WITH THE PUBLIC

SUMMARY OF KEY FINDINGS

ANNE TEMPLETON

ANEZKA BEAMISH LESKOVCOVA

GARETH CLEGG

ADAM LLOYD

ELVIRA FRASER

SENTIA KEYULONG

SAYAKA HINATA

1. BACKGROUND

Facilitating safe response in emergencies involves effective coordination between professional first responders and members of the public. However, incidents such as the Manchester Arena attack have highlighted a need to improve coordination between these groups.

As part of our UKRI-funded project ‘Simulating the impact of first responder communication strategies on citizen adherence in emergencies’, we conducted 18 in-depth individual interviews with operational staff in fire and rescue services and ambulance services across Scotland and England. We identified their views on the most and least effective ways to communicate with members of the public when asking them to follow instructions in emergencies. We explored the factors staff felt influenced how members of the public reacted to them in emergencies, why staff took specific approaches to communicating with the public in emergencies, and key challenges faced in emergencies.

2. INFLUENTIAL FACTORS

- 2.1. **Awareness of threat and need for action.** Staff repeatedly raised the importance of members of the public being aware of the threat, either through the threat being visible or being explained to them. The crucial point was that the members of the public understood the potential threat to their own safety and the benefit of the action being recommended. Conversely, issues with adherence were seen to occur if the individuals did not believe they were at risk or viewed the action being requested as unnecessary or an inconvenience to their initial goal.
- 2.2. **Trust in the organisation.** Public trust in the first responder organisation was identified as a key variable when considering whether the public would adhere to instructions. Pre-existing positive relations with the community (e.g., through community initiatives, warning and informing exercises) were seen to facilitate trust in the organisation which then facilitated adherence to instructions in emergencies. The emergencies were also seen as a time when the “trusted brand” of the organisation could be reinforced. However, lack of trust in the organisation was seen to be associated with less adherence.
- 2.3. **Power of the uniform.** Related to the points above, many staff reported that wearing uniforms, protective equipment, and having a team of responders at the scene helped them to be taken seriously when giving the instructions and guiding members of the public to follow their guidance.
- 2.4. **Tone of the communication.** Covered in more detail in Section 3 ‘Communication approaches’, staff felt their tone of communication heavily impacted the public’s reaction to them.

3. COMMUNICATION TONES

Staff discussed at length their preferred tone when asking members of the public to follow instructions in emergencies and why they felt this way. The interviews particularly focussed on face-to-face scenarios when quick response was required.

- 3.1. **Facilitative tone.** The most prominent and preferred approach by staff was to ask members of the public to perform an action in a way that framed the public as helping the staff. For example, saying “can you do that for me?” or “it would really help us if”. This tone was seen to garner the most adherence, help the members of the public feel they had more agency in the emergency, facilitate the public need to help, and appeal to the public on a personal level.
- 3.2. **Authoritarian tone.** The tone consistently least preferred was described as “authoritarian” and included giving short, direct orders with minimal contextual information, such as telling someone “you must move” without explaining why. This was believed to be a somewhat aggressive approach that resulted in defensiveness and/or reluctant adherence from a recipient, as well as broader loss of trust in the first responder organisation. However, the tone was seen as necessary if time was short or operational capacity was stretched.

3.3. Teamwork tone. Staff reported creating a tone of teamwork by using collective language such as “let’s talk about what we’re going to do here” and thanking individuals for their contribution in the emergency response. This was a less used method but was perceived to be effective because it helped members of public feel part of the team in the emergency and therefore engage members of the public to perform tasks, help to maintain calm in the emergency, and reassure the members of the public about how they reacted. However, it was viewed as difficult to do in a mass incident with multiple people, and sometimes a time-consuming process which made it difficult in many emergencies when reducing danger was first priority.

4. PROVIDING INFORMATION

Staff widely agreed that providing information about the emergency was more effective than not sharing information when asking the public to follow instructions. The information seen to be important included details about the cause of the emergency, what actions were needed, and why those actions were important. However, operational constraints limited the ability to convey information, such as maintaining confidentiality, needing to ensure the information being shared was accurate, not having sufficient time to convey the information, and concerns about worrying the members of the public.

5. INCREASING CHALLENGES

Two key challenges were viewed by many staff as increasing in recent years.

- 5.1. Capacity to work together with the public.** In some instances, the public were seen as a helpful resource such as by sharing information and/or assisting with straightforward tasks (e.g., holding a patient’s head). There was also a strong acknowledgement that the public often wanted to help in emergencies. However, this was regarded as an operational challenge that was difficult to navigate under staff’s duty to protect. The most common challenges mentioned included corroborating information from multiple sources, ensuring the correct help was being given by members of the public, not wanting to overburden an untrained person or cause them additional stress, managing large numbers of people wanting to help, and keeping people back from dangerous areas.
- 5.2. Social media.** Use of social media was seen as a challenge due to needing to find ways to reach different populations (including staying relevant on new platforms to reach younger generations), and to be seen as the main trustworthy source of information when many people are posting about an emergency. A specific tension was raised between providing information on social media quickly to show that response was underway while needing to be certain about the information.

6. REQUESTS FROM PROJECT

A recurring request from staff was to gain more evidence-based information and guidance about what words cause specific reactions when giving instructions in emergencies. While acknowledging that emergency contexts and capabilities to communicate widely vary, ideas included a flow-chart of words to say and the likely reactions, which tone was most effective to encourage public cooperations, how to de-escalate conflict in situations of non-adherence, and how to quickly get correct responses from the public.

7. RELATED RESEARCH

Many of the views of the staff interviewed align with research on public behaviour in emergencies, but there are some notable differences.

- 7.1. **Being informed about risk.** In line with staff's view that the public followed guidance more quickly if they were aware of the risk, research suggests that members of the public may underreact in emergencies^[1,2] particularly if they are not certain how to respond.
- 7.2. **Building trust through appropriate communication.** Research suggests that people are more influenced by those they believe are acting legitimately^[3] and who are in the same group as them^[4]. In an emergency, the perceived legitimacy of the first responders be increased by giving sufficient practical information to the public about what is happening the emergency, what actions are needed, why they are needed, and how to perform the actions^[3]. This subsequently increases the feeling that the public are in the same group as the responders, and therefore adherence to instructions as well as lower feelings of anxiety in the emergency. Conversely, negative views and lower adherence can occur if responders are seen to act in an overly authoritative way^[5].
- 7.3. **Public resilience.** The public predominantly want to help in emergencies, such as by providing emotional and practical support to others^[6]. Staff were concerned about over-burdening or worrying the public, but the evidence consistently shows that the public can be a remarkably useful resource such as by providing first aid and assisting others to evacuate safely. However, post-incident support is important to support well-being, such as through maintaining relations with the community and addressing their needs.

[1] Kinsey, M., Gwynne, S., Kuligowski, E.D., & Kinatader, M. (2019). Cognitive biases within decision making during fire evacuations. *Fire Technology*, 55(2), 465-485. <https://doi.org/10.1007/s10694-018-0708-0>

[2] Drury, J., (2020). Recent developments in the psychology of crowds and collective behaviour. *Current Opinion in Psychology*, 35, 12-16. <https://doi.org/10.1016/j.copsyc.2020.02.005>

[3] Carter H, Drury J, Amlot R, Rubin GJ, Williams R (2014) Effective Responder Communication Improves Efficiency and Psychological Outcomes in a Mass Decontamination Field Experiment: Implications for Public Behaviour in the Event of a Chemical Incident. *PLoS ONE* 9(3): e89846. <https://doi.org/10.1371/journal.pone.0089846>

[4] Tanis, M., & Postmes, T. (2005). A social identity approach to trust: interpersonal perception, group membership and trusting behaviour. *European Journal of Social Psychology*, 35(3), 413-424. <https://doi.org/10.1002/ejsp.256>

[5] Reicher, S., Stott, C., Drury, J., Adang, O., Cronin, P. & Livingstone, A., (2007). Knowledge-based public order policing: principles and practice. *Policing: A Journal of Policy and Practice*, 1(4), 403-415. <https://doi.org/10.1093/police/pam067>

[6] Drury, J., Carter, H., Cocking, C., Ntontis, E., Tekin Guven, S., & Amlot, R. (2019). Facilitating collective psychosocial resilience in the public in emergencies: Twelve recommendations based on the social identity approach. *Frontiers in Public Health*, 7(141), 1-21. <https://doi.org/10.3389/fpubh.2019.00141>

8. IMPLICATIONS

- 8.1. **Communicating with the public.** Further work is needed to develop training about communicating with the public. In particular, the training should focus on how to provide members of the public with sufficient information about the emergency, what actions are needed and why, and how to perform the actions. Findings ways to build deeper and more informative dialogue with members to the public in emergencies can build trust in the responders, positive relations with the responders, and subsequently adherence to their instructions.
- 8.2. **Collaborating with the public.** The public can be a valuable resource in emergencies if they have the necessary information and provisions to allow them to assist. However, this can be difficult for first responders to navigate in emergencies due to concern about overwhelming the public or knowing what useful skills or information they have. Future activities could explore which tasks can involve the public to assist first responders during the response phase, and how to streamline rapid information gathering from the public.

9. NEXT STEPS

We are currently writing in-depth analysis of the interviews to expand on the information provided in this summary and the implications they have for policy and practice in emergency response.

Additionally, this summer, Sayaka Hinata, a PhD candidate at the University of Edinburgh will run interviews with first responders to delve deeper into the barriers to providing the public with information in emergencies.

Based on the findings described in section 3, we are piloting online evacuation experiments where we alter the wording and tone of the instructions given by first responders (currently fire and rescue services) to see the effect they have on adherence to route choice, evacuation time, views of the instructions, and views of the responders providing the instructions. This will be our main focus over the next year.

10. STAY INVOLVED

If you have any questions or feedback about the project and/or our findings so far, please contact Dr Anne Templeton via email at A.Templeton@ed.ac.uk.

If you would like to participate in an interview about barriers to providing the public with information in emergencies, please email Sayaka Hinata at S.Hinata@sms.ed.ac.uk.

To keep up to date with the project, you can follow us on Twitter [@FRCCommsStrategy](https://twitter.com/FRCCommsStrategy) and LinkedIn [FRCCommsStrategies University of Edinburgh](https://www.linkedin.com/company/FRCCommsStrategies-University-of-Edinburgh) accounts, or see our website <https://firstrespondercommunicationstrategies.com/>.