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# Group processes in emergency evacuations



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*Dr Anne Templeton and Dr Yunhe Tong discuss recent research into the importance of group processes in emergency evacuations*



WHEN CONSIDERING how people will react in evacuations, planners presume which information people will attend to, whose instructions they will follow, which evacuation routes they will take, and how long they will spend before initiating evacuation. To understand these reactions, much research has focused on important issues affecting evacuation behaviour such as how clear the evacuation guidance is, how much knowledge the evacuees have about the environment, and how relevant evacuees believe a threat is to them personally.

Although these issues are important, they focus on individual-level reasons for behaviour. The issue with this is that evacuations typically require more than one person to evacuate. Whether it is colleagues in an office building, a family evacuating their home, or a mass evacuation from a sports stadium: others are often present. Understanding the collective dynamics of evacuations such as how people influence each other can help to understand how and why people behave during emergency evacuations.

Research in social psychology has looked at how people have reacted in different types of emergencies across the globe: tsunamis, earthquakes, building fires, CBRNe decontaminations, and riots. A consistent finding across these emergencies is that feeling part of a group with others tends to be related to higher trust in their information, higher social influence and higher coordination. This has important implications for the assumptions planners make about how people react in emergencies. It points to ways that group processes are important both in the time leading up to the emergency and during the emergency. Ultimately, it shows how incorporating group processes into evacuation planning can help to improve safety.

### Group processes before the emergency

Prior to emergency evacuations being needed, the future evacuees will already hold views of the organisations involved in the emergency preparedness and response. For example, residents will have views of their managing agents, councils, or property owner if they are renting. Members of the public already have views of fire and rescue services through community engagement initiatives, warning and informing exercises, and seeing them respond to incidents.

Importantly, the views of the people or organisations who provide evacuation information influence the extent to which people engage with the evacuation guidance and how likely they are to follow it. Our previous research with residents of high-rise residential buildings found a strong relationship between how much residents were willing to follow their

evacuation guidance and how much they trusted the providers of that guidance. If the organisation giving the guidance was trusted then residents were willing to follow the evacuation instructions. If the source of the information was not trusted then the residents were less willing to follow the instructions.

An important part of who was trusted depended on who was seen to be acting in the interests of the people receiving the guidance. For example, one of the people interviewed about the research said that fire safety guidance for their building tended to end up in the bin if it was sent from their managing agent because they did not feel the managing agent was acting in the interests of the residents. Interestingly, in our research with firefighters, we have found that they recognise this need and emphasise the importance of building positive links with the community to encourage people to engage with their fire safety guidance.

Another pressing issue for residents was how much they trusted that their building was sufficiently safe enough to follow the evacuation guidance, such as whether the exit routes were reliable and clear. When residents felt the evacuation guidance was unsafe to follow, this made them feel the creators of the evacuation guidance did not understand their situation and lessened their trust in them and the guidance. As a consequence, community groups would form around shared issues in the building to collectively address them.



### Group processes during the emergency

How others behave in emergencies can largely influence individual perception and decision-making. Research into group processes during evacuations – particularly when the threat is unclear – has found that people look to others to gain information about the nature of the threat and how to respond to it. During this collective consensus and decision-making, they especially look to people with whom they already have positive relations and to people they feel are part of their group. For residents, this included going further into a building to seek others and share information, and reaching out to residents via social media and group chats on phone messaging apps. In an unclear situation, people may collectively delay evacuating until they decide whether it is needed and agree the best course of action.

Although pre-existing relations are important, evacuees do not always know one another. In many emergencies, strangers have reported psychologically coming together as a group because they felt they faced the common threat of the emergency. This shared group membership was the basis for helping others to evacuate as well as other assistance such as providing first aid and emotional support. This is because we feel emotionally close to those we perceive to be part of our group. Their views and well-being become important to us and influence our decisions. This is important in understanding how the public coordinate in evacuations, but it also shows the importance of understanding group relations between emergency services and the public.

Emergency evacuations can make for tense group relations between emergency services and the public. Our research with ambulance services and fire and rescue services suggests they find that members of the public are more willing to follow emergency instructions when they have information about the incident and actions needed. However, it takes time for emergency services to establish verified information about the incident and there may be limited opportunity to share this information with the public to help build trust. We have shown that trust in the information provider is important, but as our emergency services interviewees said, emergencies are situations where trust from the public can easily be lost.

In emergency evacuations where response time is key to saving lives, both the communication approach used by emergency services towards the public and their involvement of the public in response are important in building positive group relations to facilitate safety. A common theme reported by our emergency services interviewees was that speaking to the public in a short, abrupt manner tended to break down positive group relations and result in reluctance to follow their instructions.

In contrast, communicating openly and asking the public to help the emergency services with aspects of the response was seen to both encourage the public to follow the instructions and help them feel like they had more agency in the emergency. >>>



***“[We] found a strong relationship between how much residents were willing to follow their evacuation guidance and how much they trusted the providers of that guidance.”***

## Conclusions and recommendations

Group processes influence how and why people respond in emergency evacuations. Here, we summarise the key findings and make recommendations for evacuation planning.

1. Particularly when threats are unclear, evacuees are more influenced by the people they see as being part of their group. They collaborate with others to share information and decide response. They help others to evacuate on the basis of feeling part of the same group in the emergency. To account for this, evacuation planners should consider how pre-evacuation time may be delayed while evacuees decide response or assist others to evacuate, and also plan for the possibility that people will remain or evacuate in groups.
2. The relationship between adherence to fire safety guidance and trust in its content as well as its creators show the importance of organisations engaging with potential evacuees to build positive relations and trust. Good examples of this are fire and rescue service community initiatives to get to know residents of buildings, or managing agents attending to and addressing the concerns residents hold about their buildings.
3. To mitigate breaking down positive group relations, where possible, fire and rescue services and ambulance services should not communicate with the public in an abrupt way. Instead, they should communicate information with the public about the emergency, the actions needed, and why those actions are needed. They should also work together with the public and use them as a useful resource where possible, such as by gathering information about where people may still be in the building, corralling evacuees, and helping to provide first aid or emotional support where relevant. ◀

## Further reading

Templeton, A., Nash, C., Lewis, L., Gwynne, S., Spearpoint, M. (2023). 'Information sharing and support among residents in response to fire incidents in high-rise residential buildings', *International Journal of Disaster Risk Reduction*, 92, e103713.

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