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Trusted source, trusted information, trusted support: The role of trust in resident emergency response

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If you were to ask people about their ideal, best case scenario response of people in a building fire, it might be something akin to everyone in the building instantly becoming aware of the fire, immediately following the fire safety guidance for their building, and ultimately everyone coming out of the incident unscathed because the correct procedures were followed.

This article lays out some of the reasons why people may not react this way. We show that trust is critical to understanding why people may delay response to a threat, and crucially why they might not follow the safety guidance.

First, let us look at computational models that simulate how people react in emergencies. Envisioning how people respond to fires is a basis for these models. Three crucial estimates of these models are the time taken for people to become aware of a threat, the time taken before starting to make their way to a safe space, and their likely behaviours as they progress through the emergency. Computational models set these estimates based on assumptions of how people will react, such as people's awareness of threat taking anything from one second to several hours.

Here is the crux. Some models are based on assumptions made from analysing footage of emergencies and inferring what happened. Other models are based on survey data from people who experienced previous emergencies. A not insubstantial number of models include the creator's presumptions of how people might pay attention to threats and act.



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The reason that assumptions are currently used is partially because it is difficult to gather knowledge about people's perceptions and decision-making in real-time during an emergency. Research from social psychology has made great strides in understanding people's behaviour in emergencies after the incidents (e.g., [1,2]). However, researchers cannot magically appear at an emergency with a clipboard and voice recorder to ask people why they are acting the way they do. Even having video footage of an incident does not allow the researcher to ask the participants in real time what they were paying attention to and why they chose certain decisions. Yet, the lack of nuanced data into people's perceptions and decision-making in emergencies does mean that many computational models – despite best efforts - are based on limited understanding of how people respond in emergencies.

In recent research we set out to explore how, why and when people respond in the immediate moments of an emergency, with a focus on the experiences of residents of high-rise residential buildings in the UK. We conducted surveys [3] and focus group interviews [4] with residents to better understand how, why and when they would react when first alerted to a potential threat. We found that trust is pivotal to residents' responses and many of the assumptions used in models, and in broader emergency preparedness and response, need re-evaluation.

The surveys were used to ask residents how clear they found the fire safety guidance for their building, their trust in the guidance, their trust in the creators of the guidance, and how willing they were to follow the guidance. When we analysed views of the guidance to stay put, we found that having clear guidance was not related to residents' willingness to follow it. Instead, willingness to follow the guidance was related to their trust in the guidance and their trust in the guidance creators. When looking at the guidance to evacuate, clear guidance was related to willingness to follow it. However, trust in the guidance and trust in the creators of the guidance were both still important parts of the picture of overall willingness to follow the guidance.

Another important piece of the puzzle was residents' trust that their building was safely equipped to have an evacuation or stay put policy in place. When considering both the guidance to stay put and evacuate, residents' trust that their building was sufficiently safely equipped was significantly correlated with how much they trusted the guidance and creators of the guidance.

The focus group interviews shed more light on why trust is such an important factor in emergency response. Residents reported that they distrusted people or organisations who they felt were not acting on their behalf. For example, they found it difficult to trust information from local authorities or landlords who had previously acted in ways that did not support the residents. Some residents said they put safety guidance directly into the bin if they had sour relations with the providers. On the other hand, most residents said they would follow guidance from organisations such as the fire and rescue services specifically because their purpose is to keep them safe.

Overarching theme	Theme	Key points
1. Seeking trusted information	1.1. Sharing and validating information	<ul style="list-style-type: none"> • Sharing information about incidents to establish validity and level of threat • Sharing information on social media, WhatsApp groups, etc.
	1.2. Evaluating whether information is trustworthy	<ul style="list-style-type: none"> • Trust in residents who are viewed as ingroup and acting in their best interests • Distrust in people and organisations seen to not be acting on their behalf
2. Collective social and practical support	2.1. United through the potential of shared threat	<ul style="list-style-type: none"> • Residents united by belief that fires or building cladding were a possible threat • Community groups within buildings focused on cladding safety assisted communication in fire incident
	2.2. Pre-existing relations and the provision and expectation of support	<ul style="list-style-type: none"> • Support expected among residents if they knew each other and had positive relations, or there was a positive community in the building • Lack of community invoked feelings of distrust and low expectations of support
	2.3. Limitations to providing help	<ul style="list-style-type: none"> • Some would not help others if threat was immediate, or they believed help was not needed

Figure 1. Themes and Key points

Trust among residents was also key to understanding how, why, and when residents reacted to previous fires and potential fire incidents in their building. Residents reported that they would seek and share information about the incident with trusted residents if they were unsure about the situation. They would then discuss the extent of the threat, possible actions, and decide how to respond. This was primarily in person, but residents also shared information on social media and through phone messaging applications. Importantly, they did not just look to the actions of nearby neighbours when deciding how to respond. Instead, residents sought out others who they were already part of a group with, because of shared issues in the building, or who they saw as friends. They also expected that there would be support from the other residents (such as being told about the fire) if they knew other residents or felt there was a positive community atmosphere in the building.

Together, our surveys and focus group interviews show that we need to include the importance of trust in computational models and emergency planning. We need to incorporate how trust – and

specifically the importance of being part of a group with others - affects how, why and when people respond to fire incidents. Making fire safety guidance clear is not sufficient: the people creating it need to work to be trusted by residents, including by addressing their needs so that trust in the guidance itself can be developed. We cannot assume that people will immediately react to a fire because our work shows that residents might expect others they trust to alert them if an incident is real and dangerous. Related to this, delays may occur prior to evacuation or movement to a safe place because residents seek and share information with others in their building, move around the building to do this, and use multiple methods to communicate with others.

An outcome of the research suggests that if we do not update our models and guidance to include the role of trust then we risk missing important reasons for reactions to fire incidents. If we neglect the role of trust then we risk not understanding why the ideal, best case scenario pictured at the start of this article is unlikely to happen.

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