



CREST

Centre for Research and Evidence on Security Threats



# Situational Threat And Response Signals (STARS): Public-Facing Counter-Terrorism Strategic Communication Campaigns

AN INTERDISCIPLINARY LITERATURE REVIEW

DECEMBER 2022

CHARIS RICE  
MARTIN INNES  
JENNY RATCLIFFE



# Situational Threat And Response Signals (STARS): Public-Facing Counter-Terrorism Strategic Communication Campaigns

## AN INTERDISCIPLINARY LITERATURE REVIEW

Charis Rice  
Martin Innes  
Jenny Ratcliffe

This report was produced as part of the *Situational Threat and Response Signals (STARS) project*. This project responds to the challenge of how to communicate effectively with the public about terrorism risks and threats in an increasingly complex and fragmented information environment. You can find all the outputs from this project at: [www.crestresearch.ac.uk/projects/situational-threat-and-response-signals-stars/](http://www.crestresearch.ac.uk/projects/situational-threat-and-response-signals-stars/)

### ABOUT CREST

The Centre for Research and Evidence on Security Threats (CREST) is funded by the UK's Home Office and security and intelligence agencies to identify and produce social science that enhances their understanding of security threats and capacity to counter them. Its funding is administered by the Economic and Social Research Council (ESRC Award ES/V002775/1).

[www.crestresearch.ac.uk](http://www.crestresearch.ac.uk)





# TABLE OF CONTENTS

- INTRODUCTION ..... 4
  - Key concepts and theory ..... 4
  - What does the literature tell us? ..... 6
- THEMATIC FINDINGS ..... 7
  - Situations..... 7
  - Threats.....10
  - Responses.....13
  - Signals.....16
- CONCLUSION .....20
- BIBLIOGRAPHY ..... 21
- APPENDIX 1: LITERATURE REVIEW METHODOLOGY ..... 25
- APPENDIX 2: AN OVERVIEW OF STRATEGIC COMMUNICATION THEORY DEVELOPMENT..... 27

---

# INTRODUCTION

---

This document reviews the literature on public-facing counter-terrorism strategic communication, drawing in insights from analogous contexts and specialist areas. The aim of the literature review is to provide an overview of current theory and practice that is instructive for the wider STARS project's research objectives, particularly objective:

- a. *Develop new data on the effectiveness of strategic government communication to inform publics and deter terrorist risks and threats, accounting for the influence of key actors and contextual factors.*

The review broadly followed a Rapid Evidence Assessment (REA) approach. Interdisciplinary and specialist peer-reviewed databases were searched using combinations of key terms, with a supplementary targeted search of grey literature, practitioner/specialist outlets, high profile academic journals in terrorism, key communication texts, and web search engines across the 2011-2021 time period (see appendix 1 for further detail and rationale).

---

## KEY CONCEPTS AND THEORY

---

In attempting to capture a definition fitting for the contemporary information environment, Van Ruler (2018) states that:

**“Strategic communication should be conceptualized as an agile management process in which the focus is on feeding the arenas in which meanings are presented, negotiated, constructed, or reconstructed for strategy building and strategy implementation, and on testing strategic decisions by presenting and negotiating these in a continuous loop.”**

(p.379-380)

This understanding of strategic communication captures the dynamic process through which communication flows from ‘senders’ to ‘receivers’, and reflects broader theoretical development in the study of strategic communication over recent decades (see *Figure 1*). In short, this development can be tracked from early conceptions of strategic communication as an act of dissemination - an ‘a to b’ linear process - to current understandings of communication as ‘engagement’ which, informed by the implications of social media as an increasingly central communicative medium, merits ‘connection, participation, and involvement’ (Johnston, 2018) from individuals traditionally considered ‘audiences’ (Johnston and Taylor, 2018).<sup>1</sup>

---

<sup>1</sup> See appendix for further details.



Figure 1: Overview of key theoretical developments in strategic communication theory

At the same time, this trajectory emphasises the challenges practitioners face when seeking to use strategic communication to communicate with the public for specific purposes and outcomes. Strategic counter-terrorism communication may seek various outcomes, such as to deter hostile actors, to raise awareness of terrorist threats and risks, to call the public to some kind of action, or simply to reassure of the state's protective capabilities. These desired outcomes are evident in the content and framing of specific public campaigns, but their effects will always depend on how they play out in an evolving and increasingly 'noisy' information environment, within which audiences themselves participate.

Framed by such considerations, in a study commissioned on behalf of the '5 eyes' governments, into the social organisation of public reactions to terror attacks, Innes et al. (2018) identified how the aims and objectives of post-event strategic communications evolve and adapt. Thus, depending on what has happened, they shift through various phases from managing the immediate crisis, through evidence collection, managing any reputational harms and on to promoting public reassurance. This temporal dimension starts to enrich and nuance our understandings of the different roles and functions that influence how, when, and why governments construct public communications on the topic of terrorism.

In acknowledging both the wider strategic communication research and specific counter-terrorism communicative challenges, our approach is framed by Innes' (2014) work on the role of 'signal crimes', 'signal events' and 'control signals' in shaping public perceptions and political decision-making. Informed by Erving Goffman's (1971) concept of 'normal appearances', the 'signal crimes perspective' holds that particular communicative acts are ascribed especial significance and visibility, so that when they are experienced either directly or indirectly, they induce behavioural, cognitive and affective responses, that influence how people interpret the distribution of risks and threats in their social environments. The point is that not all events hold equal capacity and capability to influence public perceptions and understanding. Further, perceptions of normality, risk and threat, are strongly influenced by the idiosyncrasies and qualities of a particular context. It is within this multi-disciplinary theoretical framing that the thematic review is grounded.



## WHAT DOES THE LITERATURE TELL US?

The review demonstrates that a wide range of linked factors impact on how public-facing CT communication campaign materials are ‘read’ and understood. Some key recurring themes were identified that can be used to inform the design and delivery of current and future campaigns. The full STARS report containing our empirical data is available here: [www.crestresearch.ac.uk/resources/stars-framework-full-report/](http://www.crestresearch.ac.uk/resources/stars-framework-full-report/)

<b>Situations</b>	<p><b>Particular situations, contexts, and local norms transform threat and risk</b></p> <ul style="list-style-type: none"> <li>• Terrorism ‘problems’ are situated within wider socio-political dynamics, which impact on public responses to CT messaging.</li> <li>• People often equate ‘home’ and routine with safety even when they live in places directly affected by conflict and terrorism.</li> <li>• Persistent, sensationalised media coverage can reduce vigilance when it doesn’t reflect lived experience.</li> </ul>
<b>Threats</b>	<p><b>Threat and risk perception relies on knowledge and trust</b></p> <ul style="list-style-type: none"> <li>• Some threats are less easily understood and recognised than others. These need different communication strategies to make them easier to grasp – such as visual messaging, metaphor, references to popular culture.</li> <li>• CT professionals and the public sometimes understand ‘suspicious activity’ differently; working towards shared understanding enables better guidance.</li> <li>• People listen to – and feel safe to raise concerns to – those (people or organisations) that they trust.</li> </ul>
<b>Responses</b>	<p><b>Demographics, social interactions and life experiences inform responses to threats</b></p> <ul style="list-style-type: none"> <li>• Human perceptions are skewed by bias and lived experience as part of a particular social group – gender, ethnicity, national and social identities affect what risks and threats we perceive and how we deal with them.</li> <li>• Social networks – ‘those like us’ - are an effective means of conveying threat and risk information.</li> </ul>
<b>Signals</b>	<p><b>Campaign signalling can produce intended and unintended effects</b></p> <ul style="list-style-type: none"> <li>• Signals are sent (sometimes unintentionally) via social cues and context, as well as by design.</li> <li>• People often perceive risk and threat based on their gut feelings.</li> <li>• Messages intended to cause particular positive or negative emotions, such as ‘fear appeals’, must find the right balance to trigger motivation, rather than disengagement or other adverse reaction.</li> <li>• Narratives and community-based initiatives can be effective ‘nudges’.</li> <li>• ‘One-way’ information-sharing campaigns can unintentionally cause public complacency – calls to action and participation are necessary.</li> </ul>

Figure 2: Key themes from the literature review

# THEMATIC FINDINGS

Our review findings are drawn from studies grounded in the following disciplines and subjects: Security; Criminology; Psychology; Communication (public relations, advertising, crisis communication, risk communication, discourse studies/semiotics); Politics/Political Science; Urban Studies; Computer Science. The main contexts covered were: Terrorism/Counter-terrorism; Violent extremism/radicalisation; Crime; Risk Management/Risk Perception; Security practice; Advertising and campaigns; Crisis/emergencies/disasters; Health.

The remaining sections of the review are dedicated to presentation of the key themes, structured under the main elements of our project acronym: **S**ituations, **T**hreats, **R**esponses, **S**ignals. These themes, dealt with separately here, but in reality often intersecting, cover studies on the content, design and effectiveness of strategic communication campaigns, the influence of particular message framing, impact and engagement across diverse audiences, and the critical role of place and local context in how information is received.

## SITUATIONS

### Key Takeaways

#### Particular situations, contexts, and local norms transform threat & risk

- Terrorism ‘problems’ are situated within wider socio-political dynamics, which impact on public responses to CT messaging.
- People often equate ‘home’ and routine with safety even when they live in places directly affected by conflict and terrorism.
- Persistent, sensationalised media coverage can reduce vigilance when it doesn’t reflect lived experience.

## INFLUENCE OF PLACE AND COMMUNITY

The role of local context is vital in understanding the impact of deterrence messages and the suitability of specific counter-terrorism campaign strategies and content. Counter-terrorism policies are interpreted through the lens of particular locales and community histories. Consequently, ‘National security agendas become nested within, and conflicted with, local community safety concerns and practices’ (Coaffee, 2019, p.7). With specific reference to the UK SiSiS and the Communities Defeat Terrorism campaigns, Coaffee argues that:

**“Despite the rhetoric of community engagement that emanates from such homogenous campaigns, civil society are not engaged on their own terms, or in relation to local issues, but on a very narrow set of national threat priorities that require a uni-directional response. This does little to pull the bias of counter-terrorism away from ‘expert’ driven and enacted operations.”**

(p.7)

The implications of the reinterpretation of national security messages within local communities is borne out in the reactions Coaffee and Fussey (2015) discuss in neighbourhood surveillance of Muslim communities. As part of ‘Project Champion’ in Birmingham, surveillance cameras, some of which were covert, were installed. Although seemingly never actually activated, the installation alone inflamed distrust towards authorities. The intended aim was to facilitate a practical policing technique to monitor suspicious activity from afar and to reassure the public of this capability and deter potential perpetrators. The security apparatus, however, was perceived by many in the local community as a ‘marker of conflict’,

## THEMATIC FINDINGS

### STARS: An Interdisciplinary Literature Review

labelling the area as a ‘dangerous place’. Its effect not only unravelled positive relationship building between the police and local communities, but also left local citizens with a heightened sense of vulnerability and marginalisation. While this incident represents only one element of the wider, complex history of relations between minority communities and the police in the UK, it is nonetheless illuminating of how local context informs how security initiatives are received, particularly since the research relies on primary data from the affected communities and local practitioners.

Similarly, deterrence initiatives can create unintended and counterproductive consequences of heightened risk tolerance and anger, particularly when situated within divided communities, as borne out in study of people living near the barrier wall in the Israel/West bank area (Cavorta and Groom, 2020). In Northern Ireland, ‘peace walls’ are considered by many residents to be a symbol of division, protecting them not just from violence from ‘the other side’ but also a ‘chronic cultural threat’ (Byrne et al., 2015). Reflecting work by Innes (2014), these findings point to the need to account for the way that major deterrence policies and strategic communication campaigns, despite intentions to de-escalate conflict, can trigger reactions highly variegated at local levels. Reactions depend upon the prevalence and distribution of presenting risks and threats, ranging from being seen as highly salient, through to irrelevant or stigmatizing.

Likewise, work by Jarvis and Lister (2016) has explored ‘everyday conceptions and constructions of counter-terrorism’. Through focus groups across metropolitan and nonmetropolitan areas of England and Wales, various conceptions and causes of terrorism were described and linked to different ‘social, political, religious and economic contexts’ (p.288) that re-cast terrorism ‘problems’ within other forms of politics. The embedded nature of security within the lived experience of individuals is an important reason why security communication may be received and interpreted in problematic and/or unintended ways. While this study is not representative, or necessarily

generalisable, analysis of individual and collective sense-making from across different demographics and locales which allows communities to ‘speak for themselves’ in this respect is valuable.

Extensive cross-national qualitative research (Grossman et al., 2020) on community reporting of violent extremism in the UK and Australia has demonstrated that the quality of local relationships both within communities, and between communities and authorities, influences individuals’ willingness to report security concerns. While specific preferences for reporting ‘thresholds’ and modes of communication varied across individuals and local contexts, a common thread was that:

**“Reporting is often about the specific, localised relationships of trust between those who make reports and those who receive information.” (p. 646)**

Extensive, multi-method consultation with local communities is critical to designing, executing and communicating counter-terrorism strategy in a way that will be meaningful, non-inflammatory, and positively received by local audiences, and conducive to community relations in the long term.

## COGNITIVE AND AFFECTIVE EFFECTS OF EXPERIENCING TERRORISM

Study of the cognitive and emotional (affective) effects of past experiences of terrorism is also instructive in this respect. While limited in generalisability, being based on US student samples, recent research by Kule et al. (2021) has found differences in individuals’ fear and risk of terrorist attacks depending on the local histories and types of past terrorism carried out where they live. For example, New York residents were most likely to fear a terrorist attack overall, but particularly an attack by a foreign international group and lone-actor Americans. Students from Tennessee were more inclined to perceive a terrorist attack by White supremacists to be likely, reflecting the roots of the Ku Klux Klan in their region. The students of Western



Illinois perceived comparably lower levels of risk and fear of terrorism, reflecting lower levels of terrorist attacks in the region. The clear implication being that situations and their micro-histories shape how salient communications on different risk and threat profiles are likely to be, and thus how and why different segments of the public are more or less likely to attend to them.

Rosenboim et al's (2011) study with Israeli college students examines the interplay of emotions, risk perceptions and precautionary behaviour in a context where a terrorist incident is not a one-off event but can be expected on a 'frequent and continuous' basis' (p.249). The study found that place of residence had no significant effect on levels of emotions, but both fear and anger were stronger when on campus than when off campus. Two causal possibilities are suggested: first, that increased emotion in a non-domestic setting reflects an implicit underlying association between home and safety (even for those within the range of Gaza rocket attacks). Second, that presence on campus might provide students with social opportunities to discuss the issue with others, which might serve to 'amplify their feelings and emotions about the situation' (p.251). Notably, fear was found to be 'the main factor explaining precautionary behavior and intentions' (p.255), emphasising its importance in shaping risk perception and responsive behaviours. The generalisability of this study's findings is impacted by the relatively small participant numbers and the student sample, however, the empirics are nonetheless useful in indicating the significance that continuous exposure to terror attacks has in influencing emotions and shaping risk perceptions.

Likewise, Keenan's (2018) qualitative study of Boston residents' perceptions before (and in a small number of cases also after) the 2013 bombing urges a 'rethinking' of the role of place in understanding reactions to (counter-)terrorism. Despite any symbolic connotations or formally labelled high risk places (e.g., high, prominent buildings), citizens tend to associate their own familiar places with safety. Particularly, and in contrast to Rosenboim et al's (2011) study, through

conversations with other citizens, concerns about terrorism are reframed benignly. Again, everyday lived experiences, in this case of safety, over-ride any objective notion of risk. While it would have been particularly useful to have interviewed all participants before and after the bombing, the paper still provides insights into how such explaining away of terrorist threat is done in the face of, and to some extent in response to, continued and often sensational media coverage, even in the aftermath of a terror attack. This finding is also reflected in a study of Belgian citizens in the aftermath of the 2016 attacks (Crijns et al., 2017). Contrary to much concern around the ability of the media to unnecessarily inflame threats and notions of conflict (Rice and Taylor, 2020), media sensationalism can also lower risk perceptions. This is seemingly due to a fatigue with continual dramatic reporting that audiences may have learned has little substance or predictive value. Keenan (2018) proposes that people engage with their local areas as 'practical' rather than hypothetical places, with personalised ideas on their risk. This again highlights the importance of understanding the distinctive features of everyday life in a given location and how this might affect how counter-terrorism messaging is (re-)interpreted.

## COMMON CHALLENGES

Research delivering insights from counter-terrorism experts and practitioners reflects an understanding of the impact of a myriad of situational variables on public perceptions of terrorism and the success of deterrence communication. At the same time, while regional and local contexts are starkly important, there are also **common factors and challenges** within and across national locations. A study of security, government, business and community practitioners in the UK and Denmark (Parker et al., 2019) identified six challenges, common to various degrees across the two locations, as follows:

- **Challenge One: *Engaging Non-Security Focused Partners*** –such as concern around the 'securitization' of stakeholders' work;

## THEMATIC FINDINGS

STARS: An Interdisciplinary Literature Review

- **Challenge Two: *Credibility and Branding*** – including suspicion and distrust towards the police and communities, particularly among minority groups who may feel labelled ‘suspect communities’;
- **Challenge Three: *Unintended Consequences*** – related to the above, the challenge of avoiding further stigmatising communities;
- **Challenge Four: *Content and Timing of Communications*** – how to deliver accurate and meaningful information to a variety of audiences in a timely manner;
- **Challenge Five: *Partnership Working*** – the challenge of multi-agency coordination and maintaining communication clarity, similarly the cultural differences in various organisations and authorities may create misunderstandings or different interpretations of the problem and solutions;
- **Challenge Six: *Media*** – while the media undoubtedly help disseminate counter-terrorism messages, they can also produce a counter-narrative, and help further demonise and isolate ‘suspect communities’.

The importance of strategically tailoring counter-terrorism messages and campaigns to specific audiences – consideration of ‘professional lexicons and framings’ - is highlighted as an avenue of further research, as well as the importance of trust building between communities and authorities. Practitioners’ professional ideas of place can contribute to a narrow concept of security (Keenan, 2016), serving to distance security professionals from local citizens and prohibit shared understandings of local problems. Community engagement can help disrupt practitioners’ assumptions and identify the arenas for productive interaction with communities.

Such studies, while single-method and limited in generalisability by relatively small samples, raise the issue that for effective targeting of counter-

terrorism campaigns, ‘places’ must be defined not just through geographical location and community demographics, but through an understanding of **how places are imagined and enacted by those who live within them**. Local history plays a crucial role, particularly that regarding conflict and terrorism, in this sensemaking.

---

## THREATS

### Key Takeaways

#### Threat and risk perception relies on knowledge and trust

- Some threats are less easily understood and recognised than others. These need different communication strategies to make them easier to grasp – such as visual messaging, metaphor, references to popular culture.
- CT professionals and the public sometimes understand ‘suspicious activity’ differently; working towards shared understanding enables better guidance.
- People listen to – and feel safe to raise concerns to – those (people or organisations) that they trust.

## CAMPAIGN MESSAGING AND BEHAVIOURAL INTENTIONS FOR TANGIBLE THREATS

There is a limited but useful body of research focused on the communicative effectiveness and behavioural impact of specific communication campaigns targeting particular types of threat. This is important given the general diversification of the international threat landscape, both in terms of attack methodologies (e.g., car attacks, stabbings, bombings, chemical, biological, radiological, nuclear and high yield explosives (CBRNE)) and the range of groups engaging in extremist action, that merit different protective and awareness messaging. Recent research has considered the impact



of a number of UK-based counter-terrorism campaigns on publics' behaviour in particular scenarios. In a cross-national comparative survey experiment involving Danish and UK publics, Pearce et al (2019) derived intentions to 'Run, Hide, Tell' (RHT) in response to a hypothetical terrorist firearm attack.

**Pre-event guidance** was found to be beneficial in encouraging intended protective behaviours which follow RHT guidance, compared to no guidance, and was associated with lower risk perception, quelling concerns that counter-terrorism communication may cause public panic. A video condition was more influential than a leaflet condition and there were relatively few differences of note in responses from groups between the UK and Denmark when demographic factors were taken into account.

In both cases, the guidance positively influenced perceptions that the police were prepared for terrorist incidents and could be trusted to provide protective security information. Clearer communication about what not to do at each stage was also raised as a potentially important addition to the campaign. Further, the authors raise the issue of whether the considerable attention devoted in the leaflet to reassuring the public that terrorist attacks are rare, could reduce the perceived need for preparedness and would be better spent on 'actionable guidance'. While the study considered the role of trust in the message source (in this case, the police), as well as measures of self-efficacy, response cost was the only factor that remained significant, meaning that campaigns may need to address the **imagined costs** publics perceive regarding adopting protective behaviours.

The same team (Lindekilde et al., 2021) subsequently compared the 'Run, Hide, Tell' campaign with its US and Norwegian counterpart, 'Run, Hide, Fight' (RHF) in an experiment again involving UK and Denmark publics. Here, the **'situational dynamics'** were derived as critical. The findings demonstrated that contrary to concerns that RHF may encourage risky or unwise behaviours, when running or hiding was not an option

(proximate attacker), RHF was more likely than RHT to prompt individuals to take protective actions (such as considering objects that could be used as weapons against the attacker). Again, the findings held across both contexts.

Pearce and colleagues (2020) have also explored the effectiveness of the 'See it, Say it, Sorted' (SiSiS) campaign in encouraging public intention to report suspicious behaviour on railway networks in Denmark and the UK. While SiSiS was found to encourage reporting of suspicious behaviour generally, and in both contexts, the study found important **differences in lay versus 'official' definitions of suspicious behaviour**. Publics responded that they were less likely to report potentially suspicious behaviour until they could gather more evidence, or without explicit instruction that the behaviour was potentially terrorism related. Participants also relayed that they would report to staff in train stations that may not have security training, for example, café employees, raising the need for these individuals to be trained in the correct protocol for action. Individuals' degree of **trust in the police**, as well as their **perceptions of police fairness** and **shared identification with the police**, was also significant in reporting intentions towards law enforcement, where UK publics were less likely than their Danish publics to believe that the police were fair and to identify with them. While valuable in drawing out some of the contingencies of counter-terrorism campaigns, in all three of these studies, results are based on hypothetical scenarios of terrorism or suspicious activity, which limits their ability to reflect or predict the complexities of 'real-world' behaviour.

## COMMUNICATING INTANGIBLE THREATS

Likewise, **different forms of terrorism may provoke different degrees of risk perception** and various public reactions to campaign communication. Systematic review of CBRN risk communication (Carter et al., 2020) suggests that 'high intensity' face-to-face discussion groups may be most effective in pre-incident communication for this type of threat,

## THEMATIC FINDINGS

### STARS: An Interdisciplinary Literature Review

particularly since the subject is often associated with misconceptions, anxiety and a sense of fatalism, which may reduce individuals' sense of efficacy in the event of such an attack. Self-efficacy is a crucial factor for this type of threat since individuals must individually take action immediately (i.e., removing clothing and washing<sup>2</sup>), and therefore communication must seek to enable this mitigating action. Outside of this, good practice tends to align with other preparedness/pre-incident risk communication standards such as clear communication of consequences of such an attack, means of transmission or 'what to spot', actions to take as preventative measures, as well as during and after an attack. Similarly, the importance of publics trusting the source of information and finding them credible is vital in effective CBRN risk communication (Gauntlett et al., 2019). In a study of CBRN terrorism (Ruggiero and Vos, 2015), CBRN experts discussed the difficulties of conveying this terrorist risk, given its invisibility, a rapidly changing landscape, multiple manifestations and effects. Good practice in communicating CBRN risk centred around: 'transparency and openness about uncertainties, using multiple communication media and personal communication involving trusted sources' (p.147). While CBRN/CBRNE terrorism may be a relatively 'niche' area, research shows that pre-incident communication campaigns do increase publics' knowledge, as demonstrated by public feedback towards the UK 'Remove, Remove, Remove' campaign (Carter et al., 2019).

Risk-related information processing by the general public in relation to nuclear emergency communication is the central focus of Perko et al's (2014) study, conducting a large-scale public opinion survey based on a real-life case study of a radiological accident in Belgium. Working with Zaller's (2006) reception-acceptance-sample model (RAS), when looking at acceptance in terms of opinion regarding 'protective actions and reassuring messages' (p.1226), the study found that **knowledge and trust in combination** were influential. This has significance for terrorism-

deterrence communications, although it is worth noting the limitation that the measure of trust in this study did not distinguish between trust in the protective measures and trust in the information about those measures (Perko et al., 2014, p.1227).

Recent reviews pertaining to the communication of infectious diseases and the COVID-19 crisis in particular, similarly accent that trust is crucial for effective risk communication. In a literature review on Public Health Emergency Communication Practices, Mackay et al (2021) found that: 'the public judges the trustworthiness of crisis communication based on the information characteristics, including consistency, repetition, and timeliness, and especially transparency and uncertainty' (p.1). In particular, health officials are trusted more than politicians and the media, due to perceived political impartiality and a lack of sensationalism. The authors however note several limitations with existing studies, such as a lack of qualitative research and the paucity of studies that engage with the public directly, nor attention to public health priority groups. Jong's (2020) systematic review of pandemics, including COVID-19, presents a thirty-item crisis communication 'Checklist for Assessing Performance', covering five domains:

- **Domain I: *Sense making in times of crisis***, e.g., social media monitoring of public discourse;
- **Domain II: *Public leadership in times of crisis***, e.g., pertaining to specialist communicative advice for politicians, that prioritises cultural context;
- **Domain III: *Public health professionals and expert voices***, e.g., convincing the public through addressing uncertainty but remaining authoritative;
- **Domain IV: *Interaction with stakeholders***, e.g., coordination with and tailoring to, different stakeholder communication needs.

---

2 REMOVE: guidance on hazardous substance exposure - GOV.UK (www.gov.uk)



- **Domain V: Instructions to the public**, e.g., instructions based on rational and emotional needs, inclusion of a call to action, clear expectations, attention towards media reach and online presence.

These studies provide a framework for testing in empirical research that may prove partly transferable to the counter-terrorism domain.

In another study, drawn from the public health arena, Landau et al (2018) examine the moderating effect of fear as a risk frame on the emotional and cognitive reaction to public health messaging campaign material on the subject of skin cancer. Recognising that metaphors are used to communicate or reframe complex or challenging issues in a more accessible manner, the study explains how metaphor shapes thinking, potentially supporting or undermining ‘productive reasoning about abstract problems’ (Landau et al, 2018, p.146).

Findings indicated that the variable combinations of matching (literal-literal or metaphoric-metaphoric) and mismatching (metaphoric-literal or literal-metaphoric) framings of a problem and the potential solution, could alter emotional resonance (worry/fear levels) and associated intentions for precautionary behaviour. Essentially, matching framings elicited better behaviour intentions than mismatching framings (p.147). The authors emphasise that the selection and application of metaphor requires skill and contextual awareness, as the wrong choice ‘can perpetuate counter-productive beliefs about health risks’ (p.147). Although this study drew participants from three different populations, the possibility remains that other individuals might respond differently. Nonetheless, the use of written and visual metaphors in counter-terrorism campaigns is a useful nuance to consider as part of a wider analysis.

Studies examining earthquake crises are also instructive in this respect. An interview-based study (Herovic et al., 2020) of earthquake scientists reported that distinct visual elements in earthquake safety campaigns were considered particularly appealing and there was an

acknowledged need to communicate risks not just during high risk periods but also during ‘quiet’ periods. Tailoring towards relevant practitioners (e.g., engineers) was important, with different message form and strategies needed for the general public. The challenges raised by experts concerned competing messages from non-experts and the media, and communicating probabilistic information and uncertainty. Strategic framing of risk was paramount in this respect, such as communicating probabilistic information in tangible terms in a manner that chimes with everyday discourse (e.g., ‘lottery odds’, 1 in 100 chance) and being transparent about what is known and unknown.

These findings highlight the importance of accounting for the pre-existing knowledge of and exposure to threat issues and experiences, in tailoring messaging appropriately, to achieve greater success and consistency of messaging acceptance across previously affected and unaffected target audiences.

---

## RESPONSES

### Key Takeaways

#### **Demographics, social interactions and life experiences inform responses to threats**

- Human perceptions are skewed by bias and lived experience as part of a particular social group – gender, ethnicity, national and social identities affect what risks and threats we perceive and how we deal with them.
- Social networks – ‘those like us’ - are an effective means of conveying threat and risk information.

Attending to responses to counter-terrorism communications, in terms of how they are interpreted and the ‘downstream’ impacts they have upon peoples’ behaviour is crucial in understanding how, when, or why such messaging does, or does not, have any shaping influence upon the overall prevalence

## THEMATIC FINDINGS

### STARS: An Interdisciplinary Literature Review

and distribution of risks and threats. This dynamic interplay between strategic communications, public sense-making and risk distribution has been elaborated by Innes (2020) where he details how the same messages can be interpreted, defined, and reacted to very differently, by different audience segments. Focusing on the aftermath of the 2017 London Bridge terror attack, he details how a public statement made by Assistant Commissioner Mark Rowley reassured mainstream public opinion, whilst simultaneously triggering ire and criticism from right-wing extremists. As the analysis shows, the latter responses proved a useful source of community intelligence in terms of developing an understanding of which groups and individuals might pose a risk of engaging in future hate crimes and associated harms.

### ROLE OF DEMOGRAPHICS IN RESPONDING TO THREAT AND RISK

The role of demographics is therefore an important factor in understanding the variable effects counter-terrorism communication has. Research demonstrates the benefit of targeted campaign messaging, given that demographic variables affect risk and threat perception, potentially causing unintended effects. Carson and Politte's (2021) work indicates that **perception of ethnicity** impacts public reporting of suspicious activity. Whilst acknowledging areas for methodological refinement, the study is significant in emphasising the potential disconnect between pre-conceptions and reality around the most demographically likely terrorism-related crime suspects. Carson and Politte (2021) point to the **implicit bias** around Arab males, despite evidence that terrorism attacks 'perpetrated by lone domestic actors operating from a far-right ideology' (Silva et al., 2019, p.2155) are now predominant. Awareness campaigns increase reporting likelihood without necessarily addressing implicit bias, but Carson and Politte (2021, p.2155) suggest that to counter this disconnect 'awareness campaigns could be at their most influential simply by combatting the most commonly held myths'. While this bias can

leave individuals unfairly marginalised from their communities, others further argue that it may also diminish reporting of community intelligence to the authorities (Fay and Crutchfield, 2019).

Haner et al (2021) surveyed 700 Americans, producing experimental evidence of the nuanced relationship between suspect ethnicity and citizen willingness to report suspected terrorist activity. In particular, contradicting Carson and Politte's (2020) earlier findings, Haner et al (2021, p.15) 'found no evidence that suspects' ethnicity, sex, or the combination of the two, had a statistically significant effect on the American public's willingness to report terrorist activity to the police'. The authors give a number of possible explanatory causes, including the larger and more diverse national sample and the broader focus on a variety of terrorist activities (Haner et al, 2020, p.15). The study found a direct link (regardless of ethnicity) between public reporting willingness and scenario seriousness, with reporting consistently lower for less serious behaviour (e.g., seeing someone reading terrorist group material) and consistently higher for more serious behaviour denoting imminent threat (e.g., hearing people talking about planting explosives) (Haner et al, 2021, p.11). Despite not finding a causal link between ethnicity bias and reporting intentions in the main sample, the authors suggest that the pertinence of 'racial animus' as 'the harbouring of animus, resentment or negative sentiment towards cultural minority groups' (Unnever and Cullen, 2010) in terrorism reporting contexts is indicated by the findings of an interactive relationship between Muslim stereotypes, nationalist identity and the willingness to report (Haner et al, 2021, p.16). Although the authors were cautious about the statistical significance, the data also indicated that **the reporter's own sense of national identity** (strongly or weakly identifying with America) might influence their tendency to report suspicious activity. Although only a tentative finding for further exploration, it does highlight the value of community engagement and cohesion-building efforts as part of a wider counter terrorism strategy.



Whilst the above studies address the issue of perception of demographics, others look at the issue of terrorism threat perception by demographic variables. Conducting qualitative interviews with Israeli citizens and analysing variables contributing to perception of the threat of terrorism in their daily lives, Cohen-Louck (2019) identifies control, vulnerability and fear as central. Findings from the study suggest that risk perception is impacted by gender. The author refers to the concept of **'circles of vulnerability'** (p.897) arising from the data, showing that female participants compartmentalised themselves and their loved ones into concentric circles, radiating from low levels of threat and vulnerability in the outer most circles, to high vulnerability in the innermost circle, due to 'real and tangible' threat. Male participants did not express this ever-present but variably distant sense of vulnerability, conveying a prevalent low sense of vulnerability to terrorist attacks, with exceptions only arising in response to a marked increase in incidents.

Cohen-Louck (2019, p.905) suggests that the study indicates that 'women are not only more sensitive to risk, but they also perceive certain situations as more dangerous', with a more generalised perception of risk which they consider in respect of their broader social network. This finding is compounded by the gendering of the way in which language is used to express fear. Cohen-Louck (2019, p.901) notes that male participants rarely directly spoke of 'fear' and 'tended not to use emotional terminology', using instead 'terms such as disquiet and a sense of vigilance', suggesting that this may be due to gendered differences in acceptability and social norms around communicating fear (p.904). Although the restricted 23-42 year old age bracket of the sample prevents generalisation of the findings across the wider age demographics, the findings nonetheless expose notable **gendered differences in the perception of terrorism risk**. This is potentially important in considering the need for well-considered target audience differentiation in the development of communications strategies, particularly those pertaining to coping and reacting

to the threat of terrorism related incidents or ongoing terrorism threats.

## SOCIAL IDENTITIES AND INFORMATION NETWORKS

Other elements of social identity have proven important in responses to terrorist threat. Kule et al's (2021) study of American young people found that those identifying as Republican and/or White assigned lower levels of risk to white supremacist terrorism, suggesting a role for **social identity** in terrorism risk perceptions. The sheer scale of complexity in terrorism risk and fear perceptions, and in drawing casual inferences, is evident in the study's finding that: 'statistically significant predictors of perceived fear and risk of terrorism included region, gender, race, political affiliation, religion, vicarious victimization by terrorism, exposure to media, taking a terrorism course, feeling that 9/11 still has an impact, and academic standing' (p.18).

In a study of the US 2008 General Social Survey, Gin et al. (2014) explored the influence of demographic factors on attitudes, perceptions, and related behaviours that, in turn, predispose individuals to take preparedness actions in terrorism related contexts. They propose a model of preparedness in which the effects of demographic variables (gender, age, socioeconomic status, and presence of children in the home) on preparedness actions may be compounded by three further factors: 'cognitive preparedness, peer behaviour awareness, and perceived effectiveness' (Gin et al, 2014, p88). Based on their findings, the authors argue that these factors have a mediating effect on social and cognitive factors, with social networks facilitating incidental social interaction, discussion and information sharing around risk prevention measures. Gin et al (2014) go on to surmise that, **more than demographics per se, 'it may be this social interaction...which influences preparedness directly'** (p.91). This implies that recognising the communicative and action-motivation role of social networks 'should be more effective than demographic-targeted preparedness messaging' (Gin et al, 2014,

## THEMATIC FINDINGS

STARS: An Interdisciplinary Literature Review

p.91), while acknowledging that preparedness will be variably influenced by an array of factors which are difficult to isolate in analysis.

While there are clear resource implications, locally and demographically tailored campaigns appear to have the best potential for audience cut-through in combination with mechanisms of dissemination that prioritise **social networks as information brokers**.

---

## SIGNALS

### Key Takeaways

#### Campaign signalling can produce intended and unintended effects

- Signals are sent (sometimes unintentionally) via social cues and context, as well as by design.
- People often perceive risk and threat based on their gut feelings.
- Messages intended to cause particular positive or negative emotions, such as ‘fear appeals’, must find the right balance to trigger motivation, rather than disengagement or other adverse reaction.
- Narratives and community-based initiatives can be effective ‘nudges’.
- ‘One-way’ information-sharing campaigns can unintentionally cause public complacency – calls to action and participation are necessary.

## MESSAGE FRAMES AND EMOTIONAL APPEALS

While the literature captured above considers the impact of the overt content of communication campaigns and the mediating role of place, demographics and social networks, research has also considered the effects of **latent content**, namely, message framing and emotional appeals. This work demonstrates how communicators can enhance the power of a message, and better prime

a desired interpretation, through the use of particular written and visual design features. In a qualitative, desk-based study (Guttman, 2015) of over 300 road safety campaign materials across 41 countries, four main persuasive appeal categories were derived regarding driver behaviour: 1. appeals to reason; 2. negative emotions; 3. positive emotions; 4. threat of enforcement. The study outlines the benefits and drawbacks of particular appeals, such as: making reason appeals based around explanation persuasive; how provoking negative emotions such as fear can elicit defensive responses and be ethically questionable; that ‘feel good’ positive emotion-based campaigns can appear weak; and that a threat of enforcement can encourage a sinister image of authorities. When campaigns contain more than one form of appeal, as is often the case, the implications for effectiveness must therefore be considered in terms of any offsets that may occur, similarly in terms of message content and graphic synchronicity. However, this study solely analysed campaign materials and literature, meaning actual public responses to these appeals are unknown, and may fluctuate depending on a host of ‘real world’ factors.

Villegas & Morton (2020) point to a broader ‘lack of theoretical understanding about the effects that the association between persuasive communication and controversial current affairs have on message persuasiveness’ (p.229). Findings from their exploratory study which draws on the discrete emotions theory of Lerner and Keltner’s (2000) appraisal tendency framework (ATF), indicate that messages aiming for a fear emotional response can stimulate unintended emotional responses (in this study disgust and surprise) which can adversely impact the message persuasiveness (Villegas & Morton, 2020, p.237). The authors emphasise the complexity of the emotion-persuasiveness link, and support taking a distinguished approach to discrete emotions, rather than clustering ‘negatively-valenced’ or ‘positively-valenced’ emotions together and assuming a broadly similar impact within these clusters. Although the applicability of the findings is hampered by the student population sample, the study offers a well-considered exploration of the interaction between different



emotions and cognitions contributing to the overall effect on message persuasiveness.

Work on online behaviour also offers insight in this respect. Jeong et al's (2021) study proposes that a positively framed message is likely to be more effective for individuals who are less involved in the targeted activity (in this case piracy) and perceive themselves to be at higher risk. By contrast, the study finds that a negatively framed message is likely to impact those more involved in piracy and perceive themselves to be at low risk. Personalised stories of harmful effects were found to be useful combined with positive framing, and statistics were useful combined with negatively framed messages. Despite the limitations that stem from the student sample, targeted messaging with appropriate frames is again the key takeaway.

## SHAME, GUILT, AND SOCIAL PRESSURE

The relative reception of shame and guilt messages, in particular, as tools for persuasion is explored in Boudewyns et al's (2013) experimental study which looks at encouraging individuals to undertake sexual health testing. While the two terms are often used synonymously, **shame and guilt have distinctively different emotional and cognitive effects:**

**“Negative outcomes such as anger and perceived manipulative intent are more likely to be associated with shame than guilt.”**

**(Boudewyns et al, 2013, p.811)**

This is in contrast with the positive association between the activation of guilt and empathy, which the authors suggest has potential for stimulating a constructive call to action and mitigating adverse reactions such as anger (Boudewyns et al, 2011, p.818). Whilst this study utilised low shame and low guilt appeals as the test materials, and the sample again comprised students, the findings enable the authors to make recommendations about how to amplify the positive effect of guilt appeals without concurrently increasing the more negative impact of shame, e.g., focusing on the behaviour rather than the individual.

Likewise, Kaviani et al (2020) considered age, risk perception and responsiveness to formal and informal deterrence methods, in the context of illegal smartphone use whilst driving. This research has potentially important transferrable findings in respect to how younger individuals perceive and respond to **informal sanctions** such as shame, embarrassment and guilt, driven by peer and community judgement of their actions. In contrast to the significance of informal sanctions in impacting perceptions and behaviour, the study found, through an online survey of drivers, that reaction to formal sanctions was not a significant predictor of behaviour. Kaviani et al (2020) note that their findings are consistent with other research within the road safety domain ‘where guilt and shame emotions were shown to drive compliance with road laws among younger road users’ (Kaviani et al, 2020, p.9). These findings challenge the predominant approach in policy and communication strategies around road safety, which are heavily reliant on formal deterrence countermeasures. This is despite research indicating the ineffectiveness of this approach, and even what Truelove et al (2017) term the ‘emboldening effect’ whereby, counterintuitively, ‘the severity of punishment had a significantly positive relationship with speeding’ (Kaviani et al, 2020, p.2). In applying the potential lessons from this study to the counterterrorism communications context, the recognition of **the significance of informal sanctions and social influence is a point of particular note.**

Language is clearly critical in generating affective responses, but it is mediated by a host of individual, social and contextual factors. The challenge evident across the literature, relates to the ability to create an emotional appeal which effectively isolates and operationalises the desired emotion, without simultaneously activating other emotions which can be counterproductive in efforts to increase awareness, engagement and responsive behaviours.

Consequently, subtle strategies have been adopted in various disaster scenario communications, such as the use of narrative framing in campaigns to **nudge people**

## THEMATIC FINDINGS

STARS: An Interdisciplinary Literature Review

**into protective action.** In quasi-longitudinal trend research from surveys throughout 1995 to 2012, Heath and colleagues (2019) discuss the persuasive appeals of a cartoon turtle called Wally on a community's knowledge of 'shelter-in-place' (SIP) guidance in the face of a chemical spill. Through a wide range of community-based initiatives and marketing tools, including introductions in local schools and social events, to posters and keyrings, Wally the turtle and his retreat into his shell has become a '**ritual model**' (Heath et al., 2017), that has spread across US states and become part of the community's identity: 'Wally becomes a nudge of social influence, the subject norm of do what Wally would do' (p.136). Wally has come to **prompt perception of protective action, rather than threat.** Research in this context supports Lindell and Perry's (2012) Protective Action Decision Model (PADM) and the theory of reasoned action (Fishbein and Azjen, 2010) which explains behaviour through understanding how people evaluate the costs and reward of actions, as well as subjective norms, largely derived from knowledge of, and conformity to, the behaviour of others (Heath et al., 2019). A key strength of this study is its longitudinal nature and how perceptions have been tracked over time and shown to have remained stable. This validates the team's conclusions on the usefulness of the campaign's communication strategy, and the contention that: 'A sustained risk campaign socially constructs shared beliefs about risk and response' (Heath et al., 2019, p.341).

### CALLS TO ACTION - INFORMATION AND ENGAGEMENT

The impact of others on the effectiveness of risk-related communication campaigns has been borne out elsewhere and in relation to counter-terrorism.

For example, a large US survey study (Wood et al., 2011) found that **communicating preparedness actions rather than risk** (and hoping actions follow) was crucial in whether individuals prepare for emergencies, including terrorist attacks. The implications of the study are that campaign strategy should include a focus on getting members of

communities who have prepared to tell others about their actions; that campaigns should be about what actions to take, rather than centring on the risk; and repetitive information that is delivered consistently over multiple channels is important.

Communicating actions appears to have informed recent UK counter-terrorism campaigns such as Run, Hide, Tell and See it, Say it, Sorted. An important learning however is, that **effective gatekeepers for calls to action** - converting awareness or knowledge gained from various information sources into action, namely actual protective behaviours - may be close peers. Wood et al's (2011) study suggests protective behaviours may be cued through observing those close to us taking action, modelling these behaviours, supporting theory on how communication is 'diffused' across social networks. The sample used in this research, while US based, included statistically representative population samples stratified across 'high terrorism visibility' and low terrorism visibility areas.

A similar tenet can be found in studies of emergency management communication and citizen preparedness. Johnson et al (2020) in their study of natural hazard communication strategy in Australia highlight the '**paradox of the positive**', whereby official communication which stresses government preparedness can inadvertently signal that publics need not prepare themselves and diminish the role citizens assign themselves in mitigating and managing emergencies. The authors state that:

**"Informational messaging attempts to develop trust in government. But such focus on the positive outcomes of new equipment, capacity, and infrastructure may actually decrease interest in personal or community-led preparedness."**

(p.8)

Interviews with emergency management practitioners revealed the tension between a historical 'command and control' approach and the need for 'community led' approaches. Establishing connections with the local community was a critical mechanism for

communication success and for the notion of shared responsibility for emergencies across authorities and citizens. Moreover, a combination of both **informational and engagement messaging** has been considered a marker of best practice in emergency preparedness communication (Johnston et al., 2019).

Likewise, Wirtz et al (2017) conducted a study drawing on data from the American National Survey of Disaster Experiences and Preparedness (NSDEP) that underscores the importance of communication campaigns focusing efforts first and foremost on 'maximising perceptions of response efficacy and second on maximizing perceptions of self-efficacy' (p836). Such findings are particularly important given there has been a move towards counter-terrorism communication that positions citizens as partly responsible for their safety and resilience in the face of contemporary security threats<sup>3</sup>, evident in campaigns such as *Communities Defeat Terrorism*<sup>4</sup>.

Clearly, the **roles depicted for state and citizen** are important in understanding campaign effectiveness and wider government-citizen relations. In a textual and visual analysis of counter-terrorism campaigns, Salerno (2017) considers how campaigns discursively position the role of the public in countering terrorism. The study notes a gradual shift from the citizen as protected by the state, to a call for action strategy that places the public as central to, and partly responsible for, noticing, reporting and ultimately combatting terrorism. Salerno considers the inherent paradoxes that are sent through campaigns such as See it, Say it, Sorted, that at once try to unify diverse communities, and simultaneously to inject a degree of suspicion and monitoring around the behaviour of one's fellow citizens, which may 'loosen community bonds'. While based on the author's 'reading' of the text alone, the potential implications for message cut-through are important and merit exploration through primary data. The sense of community and collective responsibility that contemporary campaigns and counter-terrorism policy seem to intend to promote

is at least theoretically paradoxical when the enemy to spot lies within that community.

Accordingly, inoculation theory argues that effective attitudinal change can occur through messengers acknowledging a threat, forewarning about impending persuasive appeals that may support or legitimise that threat, before refuting this with a counterargument. Studies on this issue appear increasingly relevant given the growth of disinformation as a political and terrorist tool (Innes and Innes, 2021).

One experimental study (Ivanov et al., 2016) examined how American audiences received pre-crisis messages about the terrorist hijack of aircraft and the Department of Homeland Security's (DHS) preparedness for such attacks. The inoculation message was found to effectively decrease individuals' experience of fear of a terrorist hijack as well as increase individuals' beliefs in the ability to adjust to (remain vigilant) and cope with a violent attack, implying trust in the capability of the DHS. The authors conclude that: 'From an inoculation perspective, organizations and agencies would be well served to recognize these potential threats, refute them with explanations of how the organization or agency is already addressing the issue before it is a problem, and offer any practical advice that the publics can take to participate in reducing their risk' (p.396).

Other research (Banas and Richards, 2017) based on a student sample, has sought to unpick the mechanisms of inoculation success, finding, for example, that specifically, 'motivational threat' – threat which motivates an individual to defend their attitude, rather than threat which induces fear or anxiety – explained the effectiveness of inoculation messages. A recent study carried out on Irish students (Carthy and Sarma, 2021) demonstrates that audience **participation and autonomy** (i.e., audiences actively countering rhetoric) are important aspects in the success of inoculation and counter-narratives pertaining to violent radicalization.

3 CONTEST 3.0 ([publishing.service.gov.uk](http://publishing.service.gov.uk))

4 *Report terrorist or extremist content online – Action Counters Terrorism*



---

# CONCLUSION

---

The studies in this review represent a broad interdisciplinary evidence base but they contain some notable limitations. Many studies are based on hypothetical scenarios of terrorism, student samples and single case studies, which limits their generalisability and predictive value. Similarly, sole quantitative methods fail to uncover the underlying features and reasoning that influence audience perceptions. Although qualitative studies do provide this depth, they often do so as a snapshot in time. Additionally, while rich value is gained from cross-discipline insights and study of analogous contexts, the ability to extrapolate findings to the specific and sensitive context of counter-terrorism will always be tentative. Nonetheless, this literature review has identified a wide range of intersecting variables that impact on the strategic communication process, providing a strong foundation for the primary data collection phase of the STARS project.

In starting with **Situations**, we learned that local contexts and community sensemaking colour risk and threat perceptions, and can prompt an unintended interpretation of ‘official’ counter-terrorism communication. Historical and ongoing legacies of conflict and terrorism are instrumental in this regard and impact on the cognitive and affective processing of risk and threat. Despite this, ‘home’ is often considered to be a safe harbour that diminishes individual vigilance towards threat on one’s own ‘turf’. The media can both inflame conflict and community tensions, and prompt disengagement among local people regarding the risk of terrorism when sensationalised coverage is persistent and seemingly out of touch with one’s lived experience. Relationship building and in particular, trust, among authorities and publics appears critical in productive community engagement that enables nuanced, place-based, and meaningful strategic communication devoid of erroneous practitioner assumptions. This evidence strand highlights a key

tenet of the STARS project – how particular situations and contexts transform threat and risk perceptions and prompt different reactions from the public.

Similarly, with regard to different **Threats**, it is clear that both knowledge of the threat and trust in the source of information providing this knowledge, play a key role in threat and risk perceptions of terrorism. Different communication strategies are required for tangible versus intangible threats, with the latter enhanced by visual appeals and specific linguistic tools such as metaphor and references to popular culture. Actionable guidance pervades as a fundamental best practice feature across the board but there is a need to identify and align professional and public definitions of ‘suspicious activity’.

**Responses** to threats are invariably filtered through demographic lenses. Human perceptions are skewed by implicit bias and one’s lived experience as part of a particular social group. The information networks that accompany our social relationships are a strong, albeit seemingly under-utilised, means of conveying threat and risk information, particularly since it is within these networks that trust bonds will already exist.

The **Signals** that are sent through counter-terrorism communication are important in understanding its effects. While some signals are sent by consequence of one’s situation – as outlined above – often without conscious appreciation, or via social pressure and cues, other signals are sent by design. Messages are framed to provoke particular positive or negative emotions or to target individuals with personal relevance to the messenger. The success of this approach is in walking the fine line between emotional motivation and triggering disengagement or adverse reaction. Calls to action and audience participation are common communication strategies which seek to move audiences from a position of awareness, to one of engagement, vigilance, and behaviour change.

---

# BIBLIOGRAPHY

---

- Banas, J.A. and Richards, A.S. (2017) 'Apprehension or motivation to defend attitudes? Exploring the underlying threat mechanism in inoculation-induced resistance to persuasion', *Communication Monographs*, 8(2): 164-178.
- Boudewyns, V., Turner, M., & Paquin, R. S. (2013) 'Shame-free guilt appeals: Testing the emotional and cognitive effects of shame and guilt appeals', *Psychology and Marketing*, 30(9):811-825.
- Byrne, J., Gormley-Heenan, C., Morrow, D. and Sturgeon, B. (2015) *Public attitudes to Peace Walls (2015): Survey Results*. Ulster University: pws.pdf ([ulster.ac.uk](http://ulster.ac.uk))
- Carson, J. V., and Politte, H. (2021) 'Implicit Bias Within Public Reporting: A Virtual Reality Experiment Examining "Suspicious" Activity' *Crime & Delinquency*, 67(12): 2135–2162.
- Carter, H., Drury, J., Amlôt, R. (2020) 'Recommendations for improving public engagement with pre-incident information materials for initial response to a chemical, biological, radiological or nuclear (CBRN) incident: A systematic review', *International Journal of Disaster Risk Reduction*, 51(2020):101796.
- Carter, H., Weston, D., Symons, C. and Amlot, R. (2019) 'Public perceptions of pre-incident information campaign materials for the initial response to a chemical incident: The "Remove, Remove, Remove" campaign', *Disaster Prevention and Management*, 28(5):565-584.
- Carthy, S.L. and Sarma, K.M. (2021) 'Countering Terrorist Narratives: Assessing the Efficacy and Mechanisms of Change in Counter-narrative Strategies', *Terrorism and Political Violence*. DOI: [10.1080/09546553.2021.1962308](https://doi.org/10.1080/09546553.2021.1962308)
- Cavatora, E. and Groom, B. (2020) 'Does deterrence change preferences? Evidence from a natural experiment', *European Economic Review*, 127. <https://doi.org/10.1016/j.euroecorev.2020.103456>
- Coaffee, J. (2019) 'Discipline, morality and the façade of localism in action: The war on terror and the regulation of UK community resilience', *International Journal of Law, Crime and Justice*. DOI: <https://doi.org/10.1016/j.ijlcrj.2019.100372>
- Coaffee, J., and Fussey, P. (2015) 'Constructing resilience through security and surveillance: The politics, practices and tensions of security-driven resilience', *Security Dialogue*, 46(1): 86–105.
- Cohen-Louck, K. (2019) 'Perception of the Threat of Terrorism', *Journal of Interpersonal Violence*, 34(5), 887–911.
- Crijns, H., Cauberghe, V. and Hudders, L. (2017) 'Terrorism threat in Belgium: The resilience of Belgian citizens and the protection of governmental reputation by means of communication', *Public Relations Review*, 43(1): 219-234.
- Fay, S., & Crutchfield, R. (2019) 'Perceptions of "others," risk, and counter terrorism-related informal social control', *Australian & New Zealand Journal of Criminology*, 52(3), 315–333.
- Fishbein, M.R, Azjen, I. (2010) *Predicting and Changing Behavior: The Theory of Reasoned Action Approach*. New York: Psychology Press.
- Gauntlett, L., Amlôt, R., & Rubin, G. J. (2019) 'How to inform the public about protective actions in a nuclear or radiological incident: a systematic review', *The Lancet Psychiatry*, 6(1): 72-80.

## BIBLIOGRAPHY

STARS: An Interdisciplinary Literature Review

- Gin, J.L., Stein, J.A., Heslin, K.C. and Dobalian, A. (2014) 'Responding to risk: Awareness and action after the September 11, 2001 terrorist attacks', *Safety Science*, 65(2014): 86-92.
- Goffman, E. (1971) *Relations in Public: Microstudies of the Public Order*. New York: Basic Books.
- Guttman, N. (2015) 'Persuasive appeals in road safety communication campaigns: Theoretical frameworks and practical implications from the analysis of a decade of road safety campaign materials', *Accident Analysis & Prevention*, 97(2016): 298-308.
- Haner, M., Sloan, M.M., Pickett, J.T. and Cullen, F.T. (2021) 'When Do Americans "See Something, Say Something"? Experimental Evidence on the Willingness to Report Terrorist Activity', *Justice Quarterly*, 39(5): 1079-1103.
- Heath, R.L., Lee, J., Lemon, L.L. (2019) 'Narratives of risk communication: Nudging community residents to shelter-in-place', *Public Relations Review*, 45(1):128-137.
- Heath, R.L., Lee, J., Palenchar, M.J., Lemon, L.L. (2017) 'Risk Communication Emergency Response Preparedness: Contextual Assessment of the Protective Action Decision Model', *Risk Analysis*, 38(2): 333-344.
- Herovic, E., Sellnow, T.L. and Sellnow, D.D. (2020) 'Challenges and opportunities for pre-crisis emergency risk communication: lessons learned from the earthquake community' *Journal of Risk Research*, 23(3): 349-364.
- Innes, H. and Innes, M. (2021) 'De-platforming disinformation: conspiracy theories and their control, Information', *Communication & Society*, DOI: [10.1080/1369118X.2021.1994631](https://doi.org/10.1080/1369118X.2021.1994631)
- Innes, M. (2014) *Signal Crimes: Social Reactions to Crime, Disorder and Control*. Oxford: OUP.
- Innes, M. (2020) 'Techniques of disinformation: Constructing and communicating 'soft facts' after terrorism', *British Journal of Sociology*, 71(2): 284-99.
- Innes, M., Innes, H., Dobрева, D., Chermak, S., Huey, L. and McGovern, A. (2018) *From Minutes to Months: A rapid evidence assessment of the impact of media and social media during and after terror events*. Available from: [https://orca.cardiff.ac.uk/id/eprint/120650/1/M2M+Report+\[Final\].pdf](https://orca.cardiff.ac.uk/id/eprint/120650/1/M2M+Report+[Final].pdf)
- Ivanov, B., Burns, W.J., Sellnow, Petrun Sayers, E.L., Veil, S.R. and Mayorga, M.W. (2016) 'Using an inoculation message approach to promote public confidence in protective agencies', *Journal of Applied Communication Research*, 44(4): 381-398.
- Jarvis, L., and Lister, M. (2013) 'Vernacular Securities and Their Study: A Qualitative Analysis and Research Agenda. International Relations'. *International Relations*, 27(2): 158-179.
- Jarvis, L., and Lister, M. (2016) 'What would you do? Everyday conceptions and constructions of counter-terrorism', *Politics*, 36(3): 277-291.
- Jeong, B.K., Yoon, T. and Khan, S.S. (2021) 'Improving the Effectiveness of Anti-Piracy Educational Deterrence Efforts: The Role of Message Frame, Issue Involvement, Risk Perception, and Message Evidence on Perceived Message Effectiveness', *Journal of Theoretical and Applied Electronic Commerce Research*, 16(3): 298-319.
- Johnson, K.A. (2018) 'Toward a Theory of Social Engagement'. In Johnston, K., and Taylor, M (Eds.). (2018). *The handbook of communication engagement* (pp.17-32). NJ: Wiley Blackwell.
- Johnson, K.A., Taylor, M. and Ryan, B. (2020). 'Emergency management communication: The paradox of the positive in public communication for preparedness', *Public Relations Review*, 46(2):101903.



- Johnston, K., and Taylor, M (Eds.). (2018). *The handbook of communication engagement* (pp.17-32). NJ: Wiley Blackwell.
- Johnston, K., Ryan, B. and Taylor, M. (2019) *Mapping approaches to community engagement for preparedness in Australia* (Report No. 515). Bushfire and Natural Hazards CRC, Australia.
- Jong, W. (2020) 'Evaluating Crisis Communication. A 30-item Checklist for Assessing Performance during COVID-19 and Other Pandemics', *Journal of Health Communication*, 25(12): 962-970.
- Kaviani, F., Young, K.L., Robards, B. & Koppel, S. (2020) 'Understanding the deterrent impact formal and informal sanctions have on illegal smartphone use while driving', *Accident Analysis and Prevention*, 145(2020): 105706.
- Keenan, K. (2016) 'Security is going to work: Everyday geographies, organizational traps, and the public administration of anti-terrorism policy', *Environment and Planning A: Economy and Space*, 48(2): 239–255.
- Keenan, K. (2018) 'Rethinking place in the study of societal responses to terrorism: Insights from Boston, Massachusetts (USA)', *Urban Studies*, 55(2): 461–480.
- Kule, A., Demir, M., Ekici, N. and Akdogan, H. (2021) 'Perceptions of Generation Z regarding Terrorism: A Cross-Regional Study', *Studies in Conflict & Terrorism*, DOI: [10.1080/1057610X.2021.1894737](https://doi.org/10.1080/1057610X.2021.1894737)
- Landau, M.J., Arndt, J., & Cameron, L.D. (2018) 'Do Metaphors in Health Messages Work? Exploring Emotional and Cognitive Factors', *Journal of Experimental Social Psychology*, 74: 135-149.
- Lindekilde, L., Pearce, J.M., Parker, D. and M.B. Rogers (2021) "'Run, Hide, Tell" or "Run, Hide, Fight"? The impact of diverse public guidance about marauding terrorist firearms attacks on behavioral intentions during a scenario-based experiment in the United Kingdom and Denmark', *International Journal of Disaster Risk Reduction*, 60(2021):102278.
- Lindell, M.K., Perry, R.W. (2012) 'The protective action decision model: Theoretical modifications and additional evidence', *Risk Analysis* (2012) 32: 616–632.
- MacKay M., Colangeli, T., Thaivalappil, A., Del Bianco, A., McWhirter, J., Papadopoulos, A. (2021) 'A Review and Analysis of the Literature on Public Health Emergency Communication Practices', *Journal of Community Health*, 13 :1–13.
- Parker, D., Pearce, J.M., Lindekilde, L. and Rogers, M.B. (2019) 'Challenges for Effective Counterterrorism Communication: Practitioner Insights and Policy Implications for Preventing Radicalization, Disrupting Attack Planning, and Mitigating Terrorist Attacks', *Studies in Conflict & Terrorism*, 42(3): 264-291.
- Pearce, J.M., Lindekilde, L., Parker, D. and Rogers, M.B. (2019) 'Communicating with the Public About Marauding Terrorist Firearms Attacks: Results from a Survey Experiment on Factors Influencing Intention to "Run, Hide, Tell" in the United Kingdom and Denmark', *Risk Analysis*, 39(8): 1675-1694.
- Pearce, J.M., Parker, D., Lindekilde, L., Bouhana, N. and Rogers, M.B. (2020) 'Encouraging public reporting of suspicious behaviour on rail networks', *Policing and Society*, 30(7): 835-853.
- Perko, T., Thijssen, P., Turcanu, C. and Baldwin, V.G. (2014) 'Insights into the reception and acceptance of risk messages: nuclear emergency communication', *Journal of Risk Research*, 17(9): 1207-1232.
- Rice, C. and Taylor, M. (2020) "'Reconciliation Isn't Sexy": Perceptions of News Media in Post-Conflict Northern Ireland', *Journalism Studies*, 21(6): 820-837.
- Rosenboim, M., Benzion, U., Shahrabani, S. and Shavit, T. (2012) 'Emotions, Risk Perceptions, and Precautionary Behavior Under the Threat of Terror Attacks: A Field Study Among Israeli College Students', *Journal of Behavioral Decision Making*, 25(3): 248-256.

## BIBLIOGRAPHY

STARS: An Interdisciplinary Literature Review

Ruggiero, A. and Vos, M. (2015) 'CBRN Terrorism Crises', *Journal of Contingencies & Crisis Management*, 23(3): 138-148.

Salerno, D. (2017) 'The politics of response to terror: the reshaping of community and immunity in the aftermath of 7 July 2005 London bombings', *Social Semiotics*, 27(1): 81-106.

Silva, J. R., Duran, C., Freilich, J. D. and Chermak, S. M. (2019) 'Addressing the myths of terrorism in America', *International Criminal Justice Review*, 30(3), 302–324.

Thomas, P., Grossman, M., Christmann, K. and Miah, S. (2020) 'Community reporting on violent extremism by "intimates": emergent findings from international evidence', *Critical Studies on Terrorism*, 13(4): 638-659.

Truelove, V., Freeman, J., Szogi, E., Kaye, S., Davey, J. and Armstrong, K. (2017) 'Beyond the threat of legal sanctions: What deters speeding behaviours?' *Transportation Research Part F: Traffic Psychology and Behaviour*, 50(2017): 128–136.

Unnever, J. D. and Cullen, F. T. (2010) 'The social sources of Americans' punitiveness: A test of three competing models', *Criminology; An Interdisciplinary Journal*, 48(1): 99–129.

van Ruler, B. (2018) Communication Theory: An Underrated Pillar on Which Strategic Communication Rests, *International Journal of Strategic Communication*, 12(4):367-381.

Villegas, J. and Morton, C.R. (2020) Controversial Conversations: The Emotions Evoked by Anti-Terrorism Advertising', *Journal of Current Issues & Research in Advertising*, 41(2): 229-242.

Wirtz, P.W. and Rohrbeck, C.A. (2017) Efficacy for Dealing With Terrorism Precautionary Behavior: Laying the Groundwork for Communication

Effectiveness', *Journal of Health Communication*, 22(10): 829-838.

Wood, M.W., Mileti, D.S., Kano, M., Kelley, M.M., Regan, R. and Bourque, L.B. (2011) Communicating Actionable Risk for Terrorism and Other Hazards', *Risk Analysis: An International Journal*, 32(4):601-615.

Zaller, J. (2006) *The Nature and Origins of Mass Opinion*. New York: Cambridge University Press.

# APPENDIX 1: LITERATURE REVIEW METHODOLOGY

The ten year date range of 2011-2021 was selected for the literature review, for two reasons: 1) pragmatically, to enable a manageable search within the project timeframe and; 2) in acknowledgement of the significant changes to the information and technological ecosystem over the last decade<sup>5</sup>, this period was considered to reasonably capture publications that track this development through both established and state of the art studies.

## SOURCES

The following interdisciplinary and specialist peer-reviewed databases were searched: Academic Search Complete; Science Direct; APA PsychINFO; Communication & Mass Media Complete; Perspectives in Terrorism Bibliography; Global Terrorism Database (START). After a scoping and search term test exercise across these databases to ensure we returned both relevant and manageable results, the following search term combinations were used<sup>6</sup>:

- terrorism AND/OR strategic communication
- terrorism AND deterrence AND strategic communication
- terrorism AND risk perception AND strategic communication
- terrorism AND threat perception AND strategic communication
- terrorism AND behaviour change AND strategic communication

- crime prevention AND strategic communication OR communication

We also carried out a targeted search on grey literature sources, practitioner/specialist outlets, high profile academic journals in terrorism and web search engines, using at times slightly different search terms to derive the best fit for the particular source. This identified some additional papers, either for direct inclusion in the literature review, or for wider background and context setting. In some instances, this included the addition of a few very recent publications in 2022. These supplementary sources were: The College of Policing; Open Grey; Journal - Studies in Conflict and Terrorism; Journal - Terrorism and Political Violence; Journal of International Crisis and Risk Communication Research; Journal of Risk Research; Google Scholar; CREST website; Team's own existing knowledge of key literature in relevant fields.

## CODING PROCESS

Excluding sources used to provide theoretical context for the thematic review itself, in total, we mined 6,905 records. We read the title and/or abstracts of these 6,905 records, and after removing duplicates and those deemed not relevant, we identified 119 for further review. From this, we further refined the sample (by re-reading the abstract and/or scanning the full document) to 46 records for full analysis. After the addition of newly published or other pertinent literature, on occasion through signposting from included articles' references, our total corpus was 63 sources. These 63 sources were then read and coded by two members of the research team, informed by prior study using

<sup>5</sup> See for example: Couldry, N., & Hepp, A. (2017) *The Mediated Construction of Reality*. Basingstoke: Palgrave Macmillan.

<sup>6</sup> For the *Communication & Mass Media Complete* database, an additional search dropping the term 'strategic communication' was conducted, prompting several relevant returns.



## APPENDIX 1: LITERATURE REVIEW METHODOLOGY

### STARS: An Interdisciplinary Literature Review

a REA approach (Edwards et al., 2021<sup>7</sup>; Innes et al., 2018<sup>8</sup>). We coded the articles for: Reference details; Discipline; Main Theme(s); Theoretical framework/basis; Research methods; Country of data collection; Demographics of sample; Overall findings; Particular resonance with STARS project; Papers cited that appear relevant.

The completed coding was then reviewed by the team and through a process of constant comparison and reflection, thematic connections between results were made, facilitating a set of inductively derived 'metathemes' (Lewis et al., 2010<sup>9</sup>) that captured the fundamental issues across the individual coding of sources. Themes were reviewed, revised and agreed upon across the three members of the research team to ensure validity. The review findings were then presented under thematic headings.

---

7 Edwards, L. Stoilova, M., Anstead, N., Fry, A., El-Halaby, G. and Smith M. (2021) *Rapid Evidence Assessment on Online Misinformation and Media Literacy: Final Report for Ofcom*. Available at: [www.ofcom.org.uk](http://www.ofcom.org.uk)

8 Innes, M., Innes, H., Dobрева, D., Chermak, S., Huey, L. and McGovern, A. (2018) *From Minutes to Months: A rapid evidence assessment of the impact of media and social media during and after terror events*. Available from: [https://orca.cardiff.ac.uk/id/eprint/120650/1/M2M+Report+\[Final\].pdf](https://orca.cardiff.ac.uk/id/eprint/120650/1/M2M+Report+[Final].pdf)

9 Lewis, L., Isbell, M. G., & Koschmann, M. (2010) 'Collaborative tensions: Practitioners' experiences of interorganizational relationships', *Communication Monographs*, 77(4): 460-479.

# APPENDIX 2: AN OVERVIEW OF STRATEGIC COMMUNICATION THEORY DEVELOPMENT

Aligning with the ‘professionalisation’ of communication and its widespread harnessing for strategic purposes across politics, government, business, and civil society, numerous models and theories of strategic communication have been developed. These have progressed through various theoretical ‘turns’ and present in normative, functional and instrumental forms (Valentini, 2021)<sup>10</sup>. The key perspectives and their relations to each other are summarised in *Figure 1* below.

communication study (Baxter, 1992<sup>13</sup>; Heath, 2000<sup>14</sup>; Kent and Taylor, 2002<sup>15</sup>). Similarly, alongside the growth in the professional public relations industry, critical perspectives on strategic communication which foreground the role of power – particularly power inequalities - in communicative encounters have flourished (L’Etang & Pieczka, 2006<sup>16</sup>; Edwards, 2014<sup>17</sup>). So too has debate on the ethics of persuasion in public communication, particularly from democratic governments (Edwards, 2021<sup>18</sup>; Garland, 2021<sup>19</sup>;



Figure 1: Overview of key theoretical developments in strategic communication theory

Notable reference points include those prioritising strategic communication as relationship management, ideally built on ‘symmetrical’ interactions (Grunig & Hunt, 1984<sup>11</sup>; Ledingham 2003<sup>12</sup>). However, the transformative effects of rhetoric and dialogue on such symmetry have long been a feature of

Somerville and Kirby, 2012<sup>20</sup>). An appreciation of the various cultural, contextual, situational, and issue-specific influences on strategic communication design and effects continues to provoke interest (Cancel, 1997<sup>21</sup>; Curtin and Gaither, 2005<sup>22</sup>; Kim

10 Valentini, C. (2021) *Public Relations*. Berlin, Boston: De Gruyter Mouton. <https://doi.org/10.1515/9783110554250>

11 Grunig, J.E. and Hunt, T. (1984) *Managing Public Relations*. Orlando: Holt, Rinehart and Winston.

12 Ledingham, John A. (2003) ‘Explicating relationship management as a general theory of public relations’, *Journal of Public Relations Research*, 15(2): 181–198.

13 Baxter, L. A. (1992) ‘Interpersonal communication as dialogue: A response to the “social approaches” forum’, *Communication Theory*, 2(4): 330-337.

14 Heath, R.L. (2000) ‘A Rhetorical Perspective on the Values of Public Relations: Crossroads and Pathways Toward Concurrence’, *Journal of Public Relations Research*, 12(1): 69-91.

15 Kent, M.L. and Taylor, M. (2002) ‘Toward a dialogic theory of public relations’, *Public Relations Review*, 28(1) 21–37.

16 L’Etang, J. and Pieczka, M. (eds.) *Public Relations: Critical Debates and Contemporary Practice*. New Jersey: Lawrence Erlbaum.

17 Edwards, L. (2014) *Power, diversity and public relations*. London: Routledge.

18 Edwards, L. (2021) ‘Organised lying and professional legitimacy: Public relations’ accountability in the disinformation debate’, *European Journal of Communication*, 36(2), 168–182.

19 Garland, R. (2021) *Government Communications and the Crisis of Trust*. Switzerland: Palgrave MacMillan.

20 Somerville, I. and Kirby, S. (2012) ‘Public relations and the Northern Ireland peace process: Dissemination, reconciliation and the ‘Good Friday Agreement’ referendum campaign’, *Journal of Public Relations Inquiry*, 1(3): 231-255.

21 Cancel, A.E., Cameron, G.T., Sallot, L.M. and Mitrook, M.A. (1997) ‘It Depends: A Contingency Theory of Accommodation in Public Relations’, *Journal of Public Relations Research*, 9(1), 31-63.

22 Curtin, P.A. and Gaither, K.T. (2005) ‘Privileging Identity, Difference, and Power: The Circuit of Culture As a Basis for Public Relations Theory’, *Journal of Public Relations Research*, 17(2): 91-115.

et al., 2021<sup>23</sup>; Sriramesh & Vercic, 2019<sup>24</sup>). More recently, communication theorists have considered the meaningful distinction of communication as ‘engagement’ which, informed by the implications of social media as an increasingly central communicative medium, merits ‘connection, participation, and involvement’ (Johnston, 2018<sup>25</sup>) from individuals traditionally considered ‘audiences’ (Johnston and Taylor, 2018<sup>26</sup>).

---

23 Kim, J.-N., Tam, L., & Chon, M. (2021) ‘A conceptual genealogy of the Situational Theory of Problem Solving: Reconceptualizing communication for strategic behavioral communication management’. In C. Valentini (Ed.), *Handbook of communication science: Public relations* (pp. 471-486). De Gruyter. <https://doi.org/10.1515/9783110554250-024>

24 Sriramesh, K., & Verčič, D. (2019) *The Global Public Relations Handbook: Theory, Research, and Practice (3rd ed.)*. Routledge. <https://doi.org/10.4324/9781315173290>

25 Johnson, K.A. (2018) ‘Toward a Theory of Social Engagement’. In Johnston, K., and Taylor, M (Eds.). (2018). *The handbook of communication engagement* (pp.17-32). NJ: Wiley Blackwell.

26 Johnston, K., and Taylor, M (Eds.). (2018). *The handbook of communication engagement* (pp.17-32). NJ: Wiley Blackwell.



For more information on CREST  
and other CREST resources, visit  
[www.crestresearch.ac.uk](http://www.crestresearch.ac.uk)

The logo graphic consists of three concentric, semi-circular red arcs on the left side, partially overlapping a solid red circle. The word "CREST" is written in white, uppercase, sans-serif font across the middle of the red circle.

CREST

CENTRE FOR RESEARCH AND  
EVIDENCE ON SECURITY THREATS