

# How robust is the evidence base for the human ability to recognise suspicious activity/hostile reconnaissance?

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## INTRODUCTION

Security procedures at large public venues and transportation hubs rely upon vigilant and engaged security officers who are tasked, in part, with timely and appropriate responses to suspicious behaviours (behaviour that seem unusual or out of place, that indicates that someone is in the process of planning or committing a malicious act) of potential hostiles (be they criminals, or terrorists) looking to victimise normal site users. This includes individuals conducting hostile reconnaissance, defined as “purposeful observation with the intention of collecting information to inform the planning of a hostile act against a specific target” (CPNI, 2016).

The presumption is that hostiles, armed with the ‘guilty knowledge’ of their true intention will behave or present in non-normative ways versus normal site users and thus provide opportunities for security to detect these suspicious behaviours (Gill et al., 2020). But how capable are individuals at detecting suspicious behaviour? This systematic review assesses the current evidence base for the human ability to accurately recognise suspicious behaviour.

The evidence for a narrower form of deception – lie detection – paints an interesting picture. In terms of lie detection, Bond and DePaulo’s (2006) meta-analysis found that just 54% of untrained observer judgments were correct, only slightly higher than chance. Performance was worse when observers could only see the target person (52% accuracy), than when they could only hear them (63%). However, liars are more



nervous and more conscious of their own behaviour than truth tellers (Vrij, 2008; Vrij et al, 2019) and when being interviewed are aware that they are being actively observed and scrutinised. Those with hostile intent may not believe that they are being watched, but they may be vulnerable to the spotlight effect – a tendency to believe they are being noticed more than they are and as such overestimate the extent to which they are the focus of the attention of others (Gilovich et al, 2000).

## KEY FINDINGS

- 7033 unique studies were sifted to identify studies that examined the human ability to recognise suspicious behaviour.
- 11 studies met the inclusion criteria.
- Seven studies looked at the difference in ability between experienced CCTV operators and controls; two looked at the influence of context; one on the

influence of stressors; and one on the influence of training.

- No significant differences were found between experts and novices. Accuracy appears to be around chance level.
- The observer's familiarity with an area may have a positive effect on detecting suspicious behaviour.
- Participants exposed to security cues while carrying out tasks were more often correctly identified by observers as either innocent or hostile based on their behaviour.
- Behaviour based training may increase an individual's ability to recognise suspicious behaviour.
- Individuals differ in cognitive and perceptual skills and therefore infer different meanings from viewed behaviour. These differences in the interpretation of cues may affect the ability to accurately detect suspicious behaviour.
- Cues of hostile intent may be difficult to interpret accurately due to the observer's absence of the perpetrator's baseline 'normal' behaviour with which to compare.
- Establishing non-verbal indicators of hostile intent that are accurate across many contexts is difficult. Observers need knowledge of 'normal' behaviour for each specific location.

### ABOUT THIS PROJECT

This Executive Summary comes from a report produced from the Factors That Deter Threat Actors And Reconnaissance project. The project aims to develop our understanding of hostile actors' experiences and behaviour, including their target selection and reconnaissance, with the purpose of informing existing and new forms of deterrence. You can find the report this summary is derived from as well as all the other outputs from this project at: [crestresearch.ac.uk/projects/factors-that-deter-threat-actors-and-reconnaissance/](https://crestresearch.ac.uk/projects/factors-that-deter-threat-actors-and-reconnaissance/)

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