

Researching *what* it means, *how* it manifests and *why* it occurs during critical and major incident management

Abstract

Introduction: Decision inertia is the redundant prolongation or failure to implement a high-stakes, irreversible decision which has far reaching consequences. It often occurs during emergency incidents management during 'do or don't' decisions (e.g. The decision to enter a burning building or not; the decision to declare a major incident or not). **Method:** Firstly: a detailed literature review will be conducted to develop a theoretically driven definition of *what* decision inertia is. Secondly: the behavioural and verbal consequences of decision inertia will be explored to see *how* this psychological construct manifests in the real-world environment. Thirdly, research will be conducted to see *why* decision inertia occurs. **Results:** Data will be analysed using mixed methods both quantitatively and qualitatively. Findings will extend the theoretical understanding of decision inertia as a concept and provide practical application to assist emergency service critical incident decision making.

Introduction

Critical incidents often consist of a number of high risk, high stake, irreversible 'do or don't' decisions (e.g. the decision on whether to send fire fighters into a burning building). Yet paradoxically when faced with these time sensitive, high consequence and important decisions, decision makers tend to favour inaction and continually delay their engagement with the decision process rather than commit to a choice. This is Decision Inertia: *the redundant prolongation or failure to implement a high-stakes, irreversible decision.*

The present research will address the current gap in the research on avoidant decision making by asking:

- **What** is decision inertia?
- **How** does decision inertia manifest in context?
- **Why** does decision inertia occur?



Research Q1: What is decision inertia?

Aim: To produce a theoretical model of decision inertia

Method: A *Critical Interpretive Synthesis* was conducted on the literature to create a 'synthesising argument' (theoretical model) of decision inertia. This is an iterative and dynamic approach to conducting a literature review, whereby key words and phrases are updated in response to findings and search results.

Results: Figure 1 depicts the resulting synthesising argument for how decision inertia may manifest in context (Research Q2). Figure 2 depicts the resulting synthesising argument for what causes decision inertia (Research Q3).

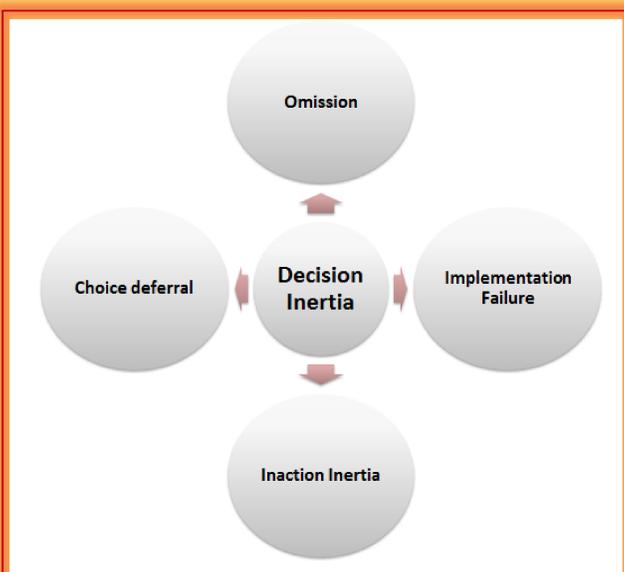


Figure 1: Theoretical model for *how* decision inertia manifests in context

Research Q2: How does decision inertia manifest in context?

Aim: As decision inertia is a psychological construct, a live, multi-agency emergency services training exercise will be used to observe and identify how decision inertia manifests behaviourally and verbally during incident command.

Participants: Strategic decision makers across the emergency services attending a live training exercise coordinated by Merseyside Fire and Rescue service.

Procedure: Participants will be responding to a live play exercise hosted by the Merseyside Fire and Rescue Training and Development Academy. The scenario will test the interoperable response capabilities of the emergency services in response to a collapsed building incident. The scenario escalates over time to a terrorist attack with hostages being held in a separate location. During the training exercise, emergency responders on the ground will conduct urban search and rescue to save 'victims' (live role players) who will be hidden within the rubble pit, whilst silver and gold command meetings will be held remotely.

Measures: A number of key 'do or don't' decisions have been built into the scenario (e.g. to pull crews out of building or not). Post-task semi-structured interviews will ask strategic commanders about their experience of decision inertia on these decisions. Responses will be supplemented by observing and transcribing the videoed silver and gold command meetings to monitor and analyse behavioural and verbal indicators of self-reported inertia.

Results: Findings will be amalgamated to produce a coding dictionary of typical behavioural and verbal indicators of decision inertia in context.

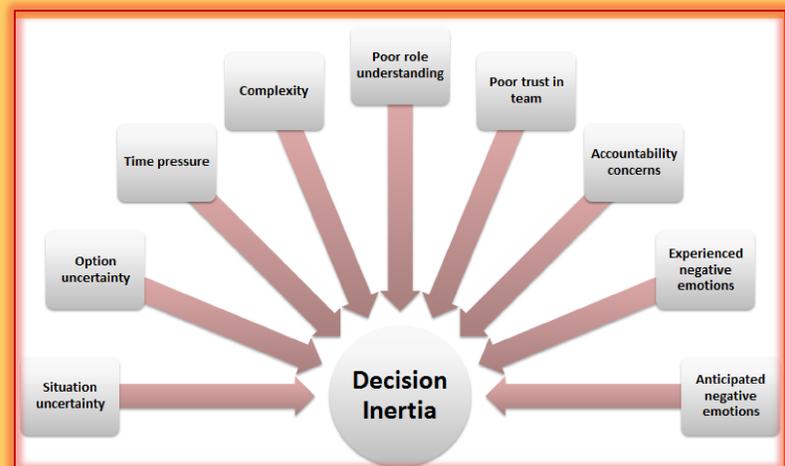


Figure 2: Theoretical model for *why* decision inertia occurs

Research Q3: Why does decision inertia occur?

Aim: Fire officers will work through a computer simulation using audio feeds. Their decisions and experiences will be logged to figure out which factors are associated with decision inertia.

Participants: Fire officers ranging from Crew to Area Manager.

Procedure: Participants will work through a computer simulation presenting six audio feeds concerning a road traffic collision in the Mersey Tunnel. Following each audio feed they must log their key decisions and rationale and answer a rating scale to measure their perception of potential causal variables of decision inertia (as in Figure 2). In addition, participants will be split into two groups to see whether the presence of other emergency services agencies affects the likelihood of decision inertia (by manipulating one audio feed).

Measures: Participants' responses will be compared to a 'gold standard' response generated by subject matter experts to see whether they delayed or failed to instigate important 'do or don't' decisions. Participants will also answer a questionnaire about these key decisions.

Results: Findings will be analysed to reveal which factors appear to be predictive of decision inertia.