

# From Signals to Prevention: Operationalizing Behavior- Centered Security with Technology

Presented by Michael Rozin, CTM®

# Michael Rozin, CTM®

*President, Rozin Security Consulting and Rozin Technologies LLC*

25+ years of Security and Targeted Violence  
Prevention Experience

Served as Principal Security Consultant  
internationally for numerous Fortune 10-500  
companies, law enforcement agencies, intelligence  
agencies, school districts, universities,  
municipalities, and critical infrastructure

Developed SIRA proactive behavioral threat  
mitigation program

Program presented to the US Congress, House of  
Representatives Committee on Homeland Security

Israel Defense Forces

Israel Ministry of Finance

Israel Airport Authority / Israel Security Agency  
(Shin Bet)

Mall of America

Rozin Security Consulting LLC

University of Minnesota

Hennepin County Sheriff's Office



# Signals.

In nearly every targeted violence attack,  
the warning signs were present.

CASE STUDY

# Manchester Arena Terrorist Attack

Date: May 22, 2017 / Ariana Grande Concert

Timing: 22:31 / immediately after the concert ended

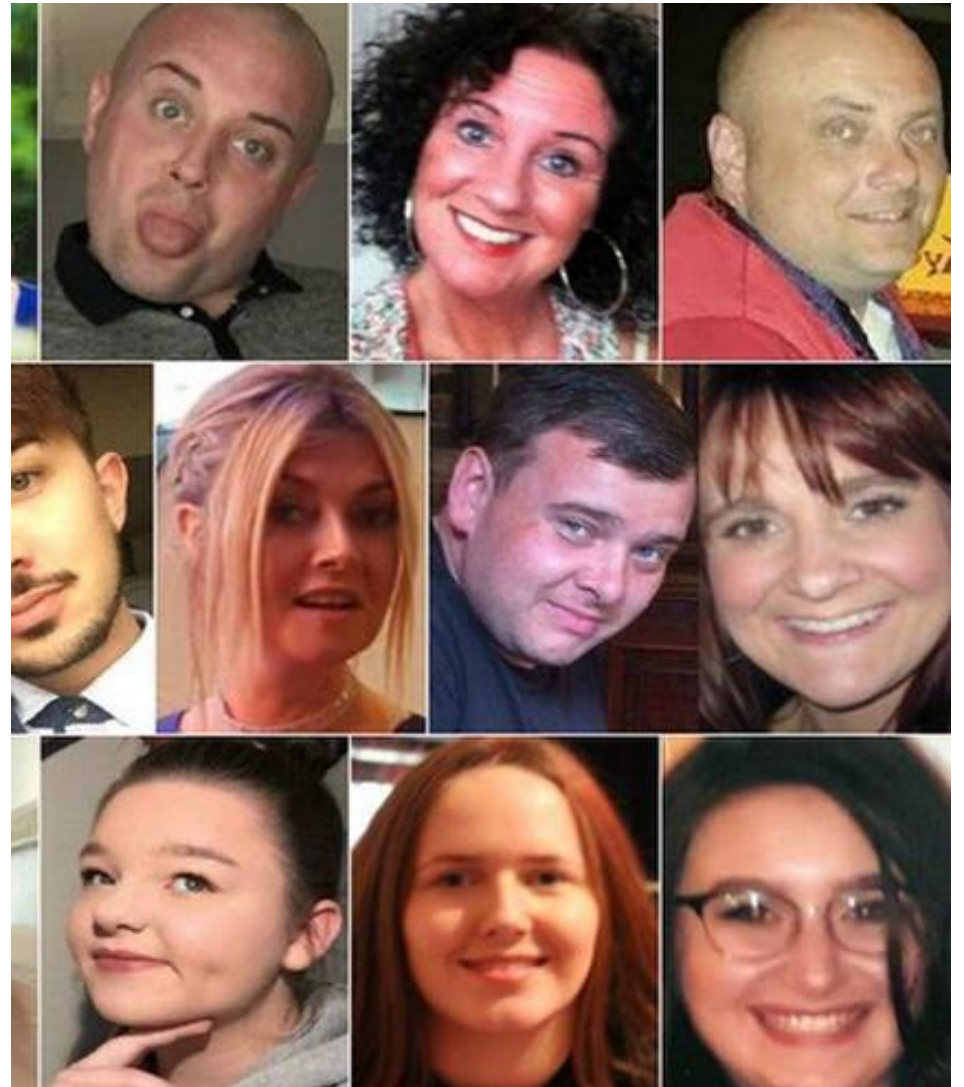
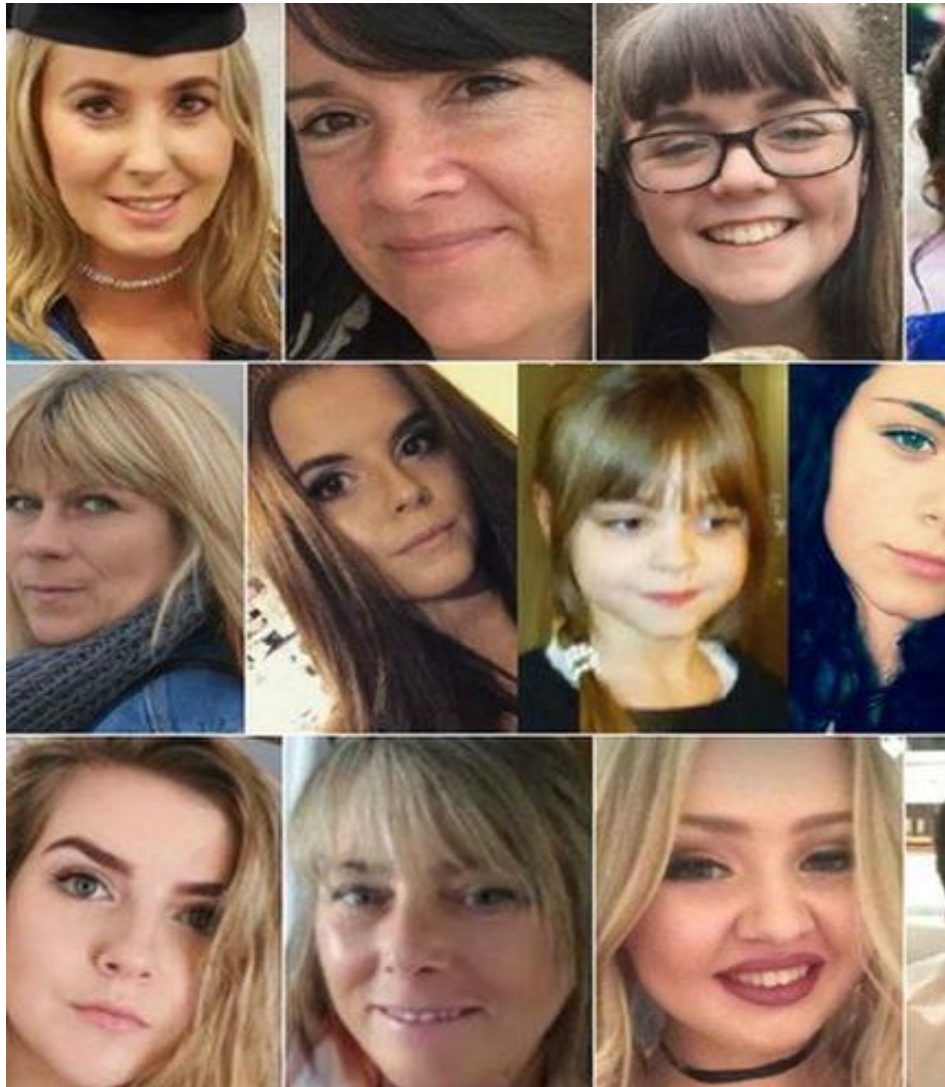
Method of Attack: Person Bourne-IED

Perpetrator: Salman Abedi

Casualties:

22 people killed

1,017 people, mostly children, were injured





Salman Abedi  
and his  
behavior  
leading up to  
the attack.





#### Surveillance:

- Before the attack Abedi attended the site several times.
- May 18, 2017: Salman Abedi was seen on CCTV wandering up and down in front of the doors to the arena behind two security staff.

#### Rehearsal:

- May 21, 2017: Abedi, wearing a large backpack, mingled oddly with crowds of young girls and their parents heading to the Ariana Grande concert.





### Execution (May 22, 2017):

- Abedi entered the Manchester Arena at 20:48.
- Abedi could be seen staying behind security officers, with a backpack, not moving typically.
- At 22:15, a member of the public reported Abedi for acting odd, wearing black clothes and a large rucksack to show security.
- One security guard observed Abedi but said that he did not intervene in case his concerns about Abedi were wrong and out of fear of being considered a racist.
- The security guard tried to use his radio to alert the security control room, but could not get through.

# The Signals Were There

**MAY 18**

## ● Surveillance

Abedi observed on CCTV wandering in front of arena doors, positioning himself behind security staff.

**MAY 21**

## ● Rehearsal

Abedi, wearing a large backpack, mingles oddly with crowds of young girls and parents at the Ariana Grande concert.

**MAY 22 — 20:48**

## ● Arrival

Abedi enters the City Room with a backpack. Lingers behind security officers. Movement pattern deviates from normal egress flow.

**MAY 22 — 22:15**

## ● Public Suspicious Activity Report

A member of the public reports Abedi to security: black clothing, large rucksack, standing alone. A guard observes but does not intervene — citing fear of being considered racist.

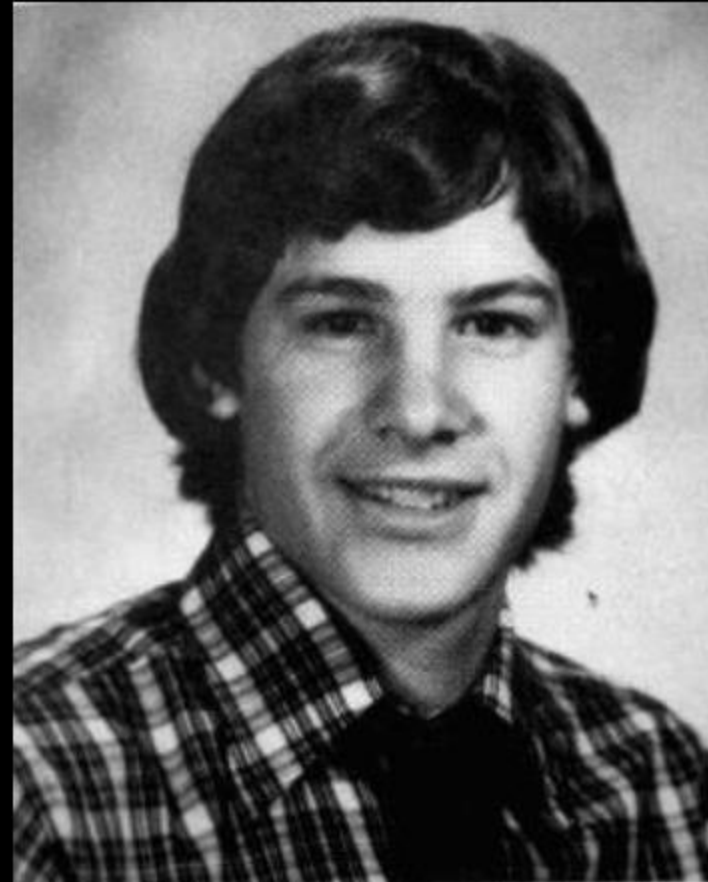
**MAY 22 — 22:31**

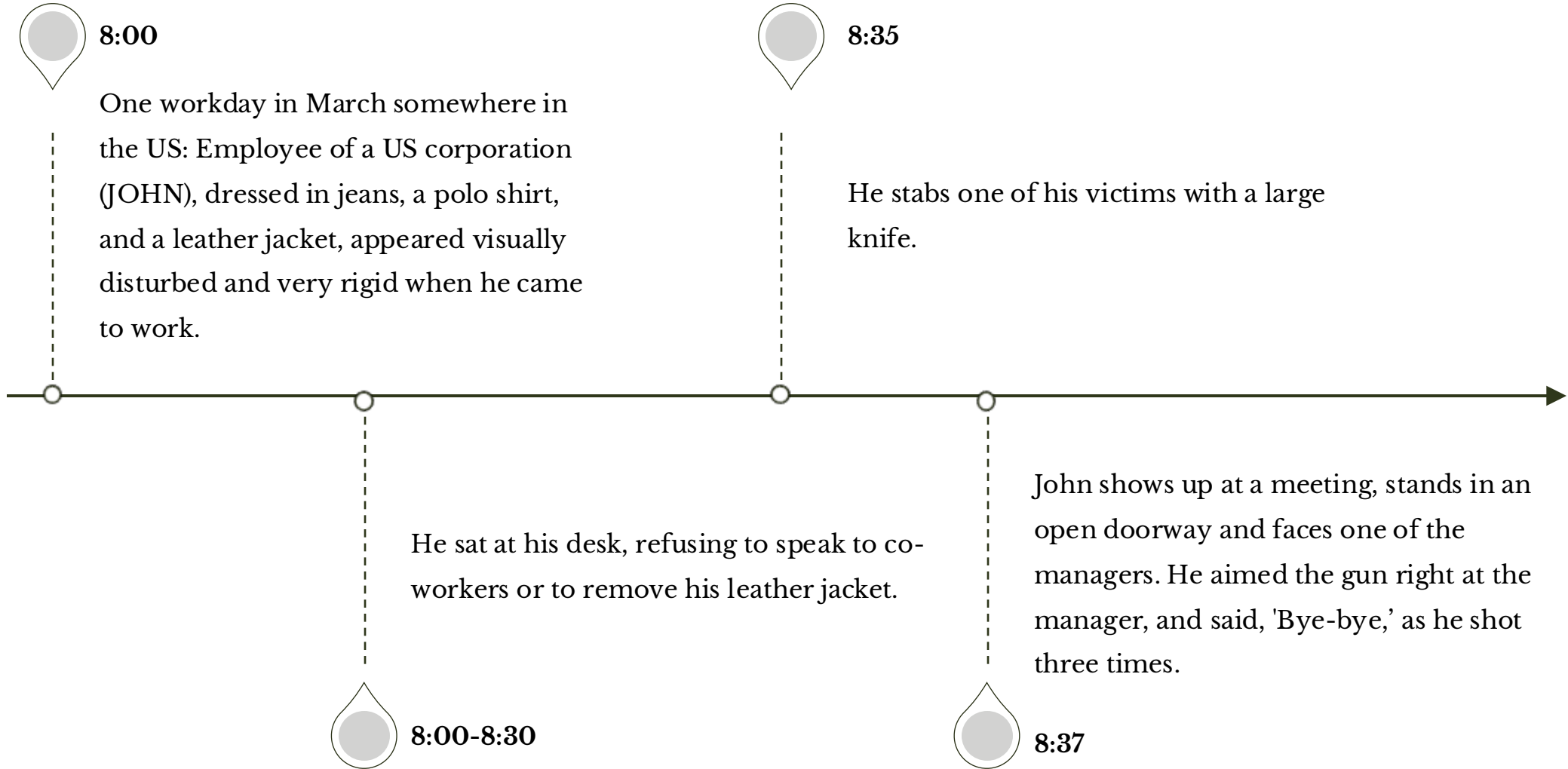
## ● Detonation

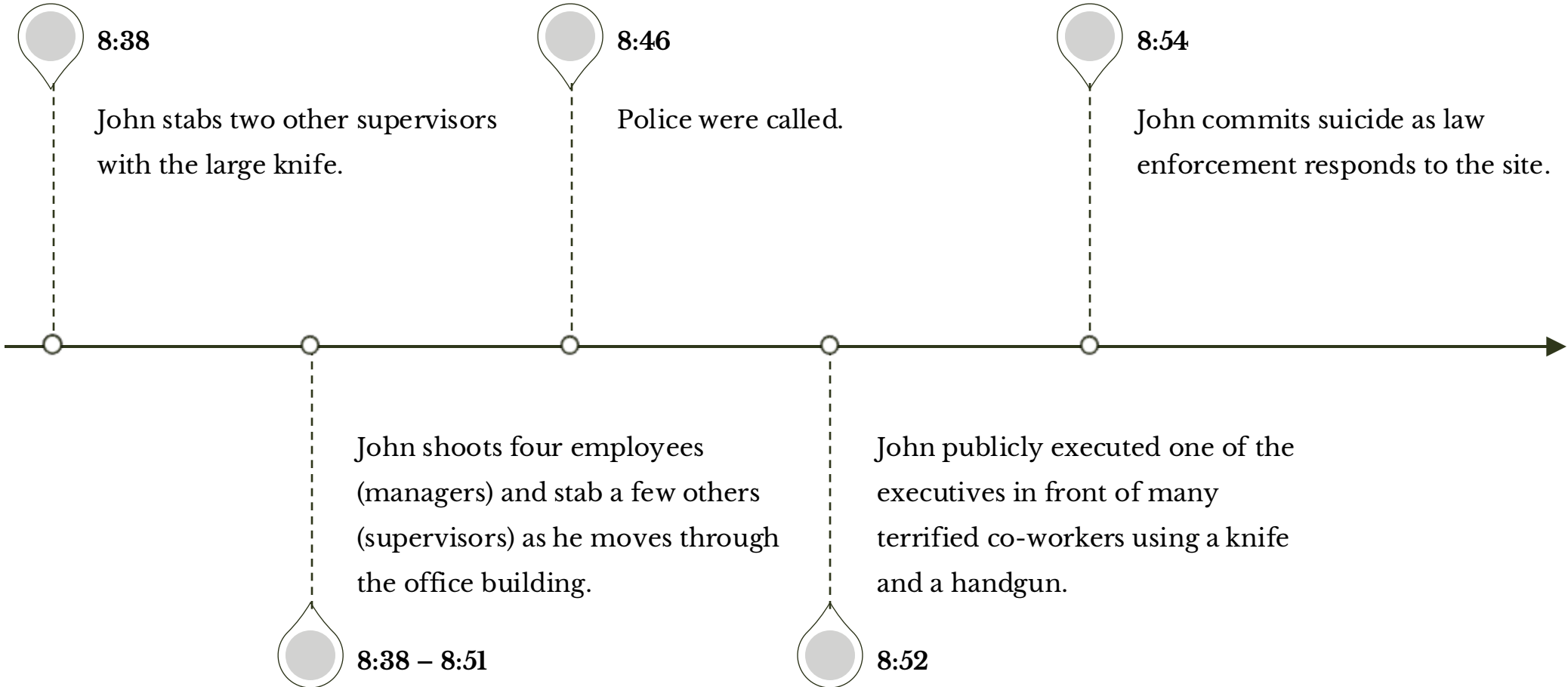
Radio call to control room fails to connect. Abedi detonates the device as the concert ends.

CASE STUDY

# Workplace Violence Incident







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Victims



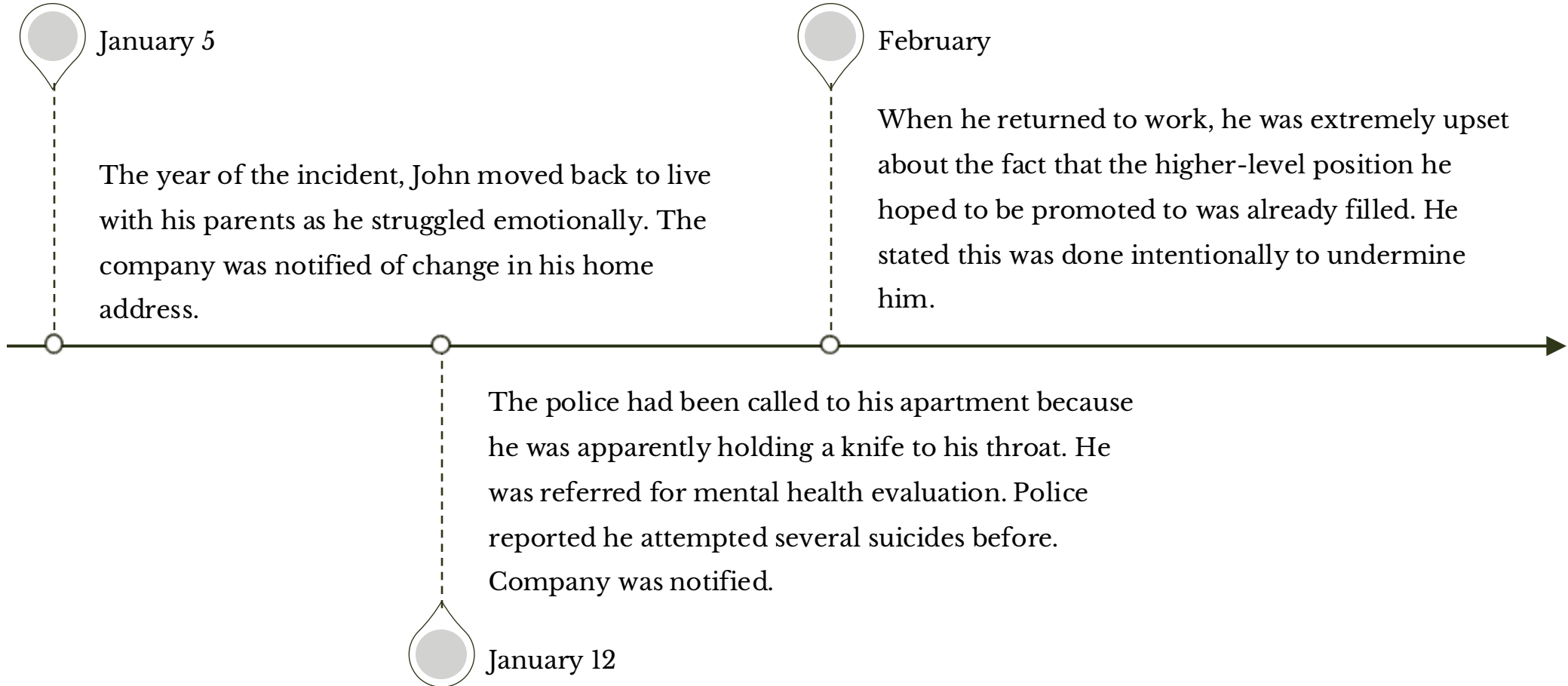
When he was hired, his resume showed he previously worked as a federal security officer experienced with firearms, tactical response training, and situational analysis.

During his hiring interview, he stated he was looking for ‘a more stable, less emotional place to work.’

In October (previous year), John was granted a leave of absence for stress-related problems. Before his leave, he had been upset about orders that he perform data processing and software installations, tasks that were not in his job description and that would usually come under another position that paid more per hour.

John filed multiple grievances and won one of them.

John was reported to be often angry. He complained consistently that he was being treated unfairly.



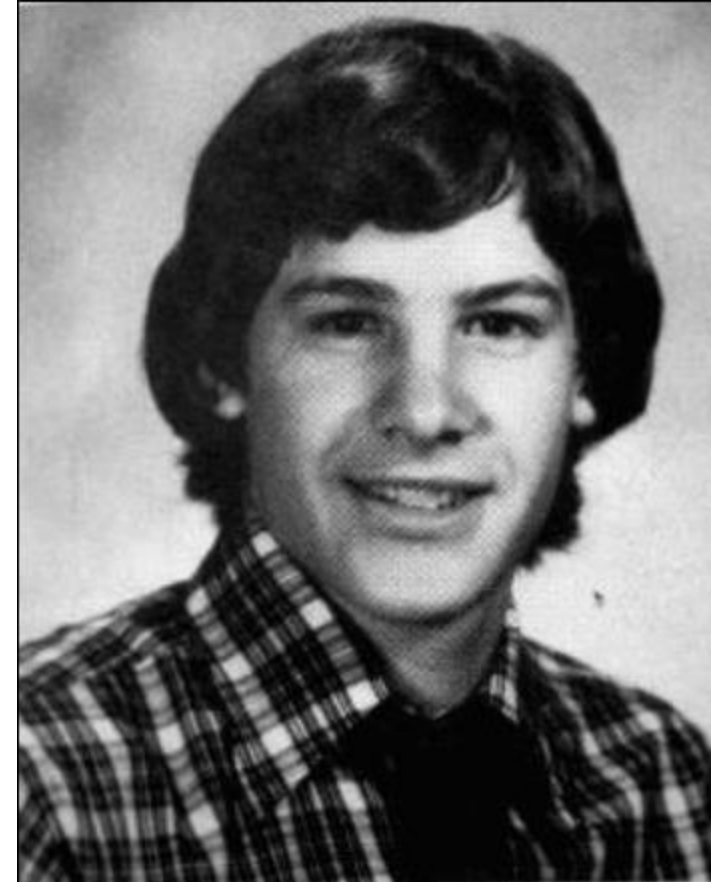
He continued to be very angry.

John said to his co-workers: “The management is ruining my life!”

John stated the company steals money from clients. He claimed to his peers the company is unethical and should be stopped.

John stated his life situation is intolerable and blamed the company for it in his conversation with his direct supervisor.

John shaved his head a week before the incident.



# Organizational Perspective

“It is not possible for an organization like ours to prevent someone from carrying out such act once they commit to it. The best we can do is prepare for it.”

“There is no way we could have predicted something like this.”

“When you present it in a timeline, of course it looks serious, but how can you possible know it in real time?”

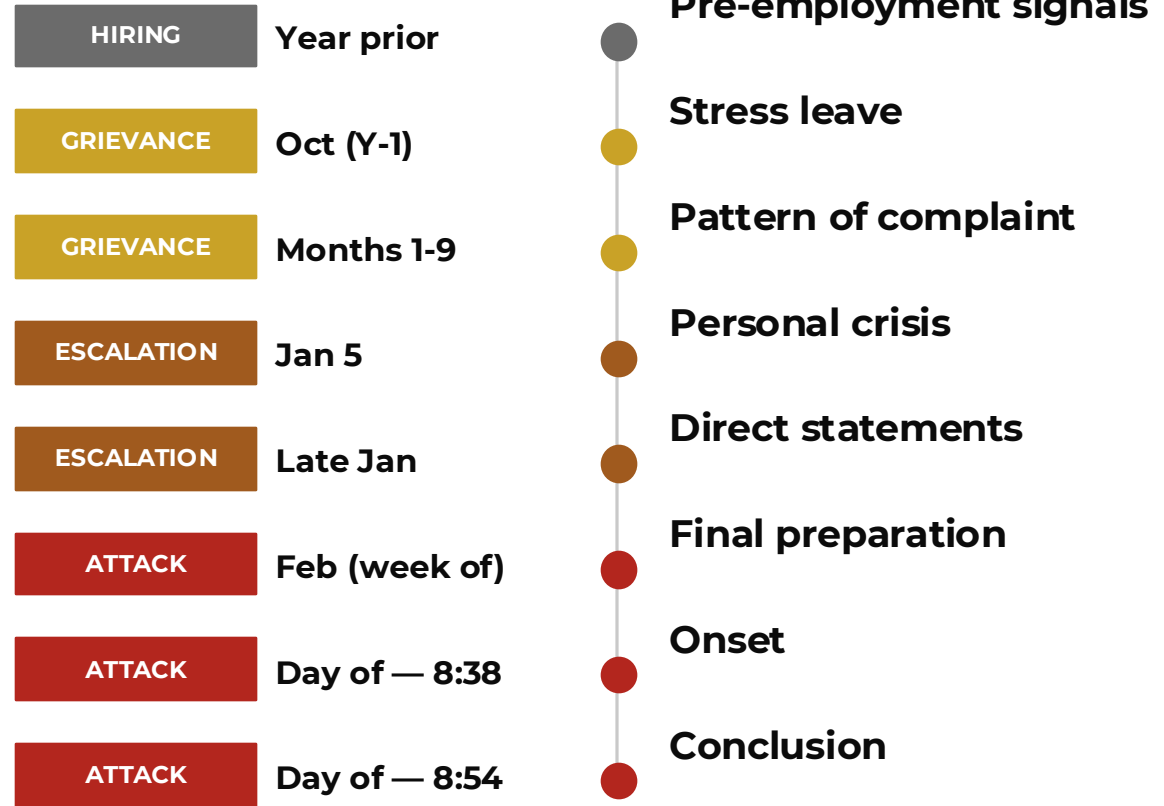
# The Signals Were There

Eight pre-attack warning behaviors.

Across more than fourteen months.

All observed.

None acted on.



# The Evidence.

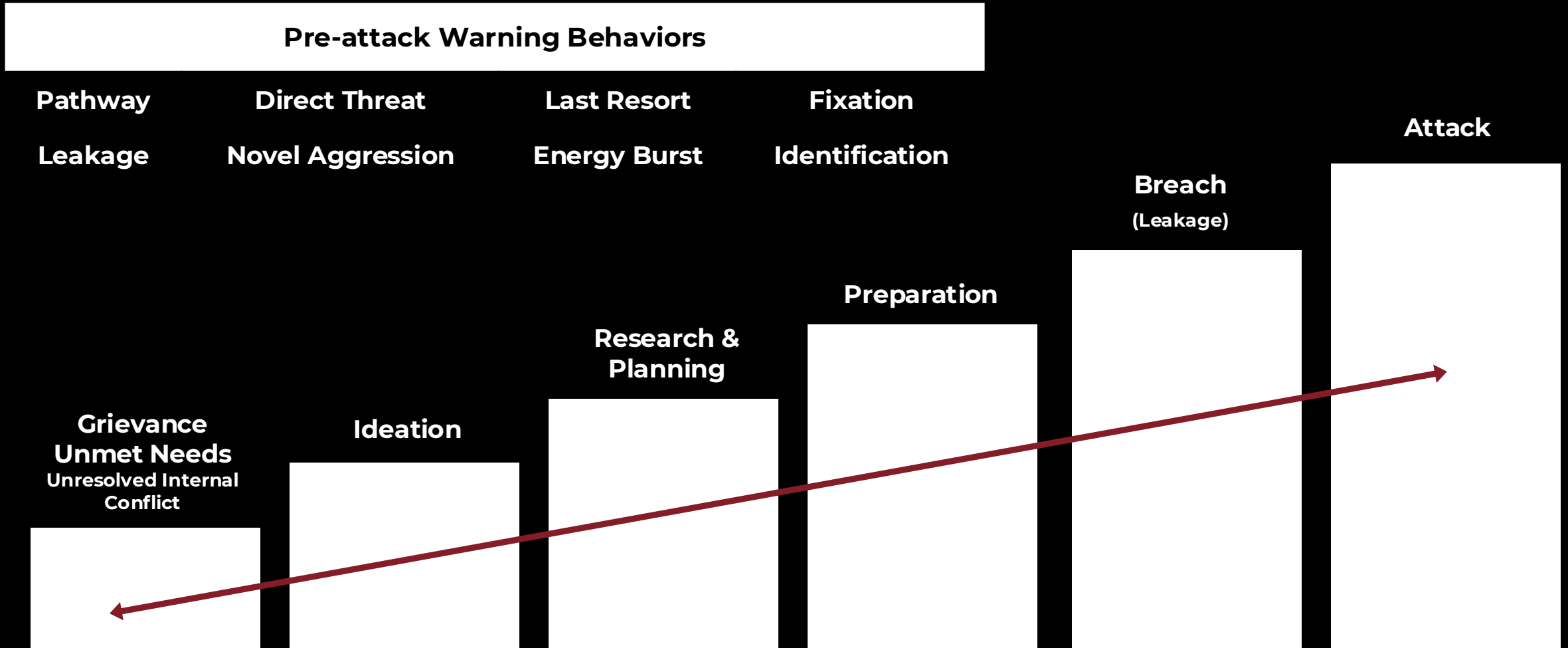
Targeted violence is not random. It is progressive, observable, and predictable. Security must be able to act on these signals!

# Two Types of Violence

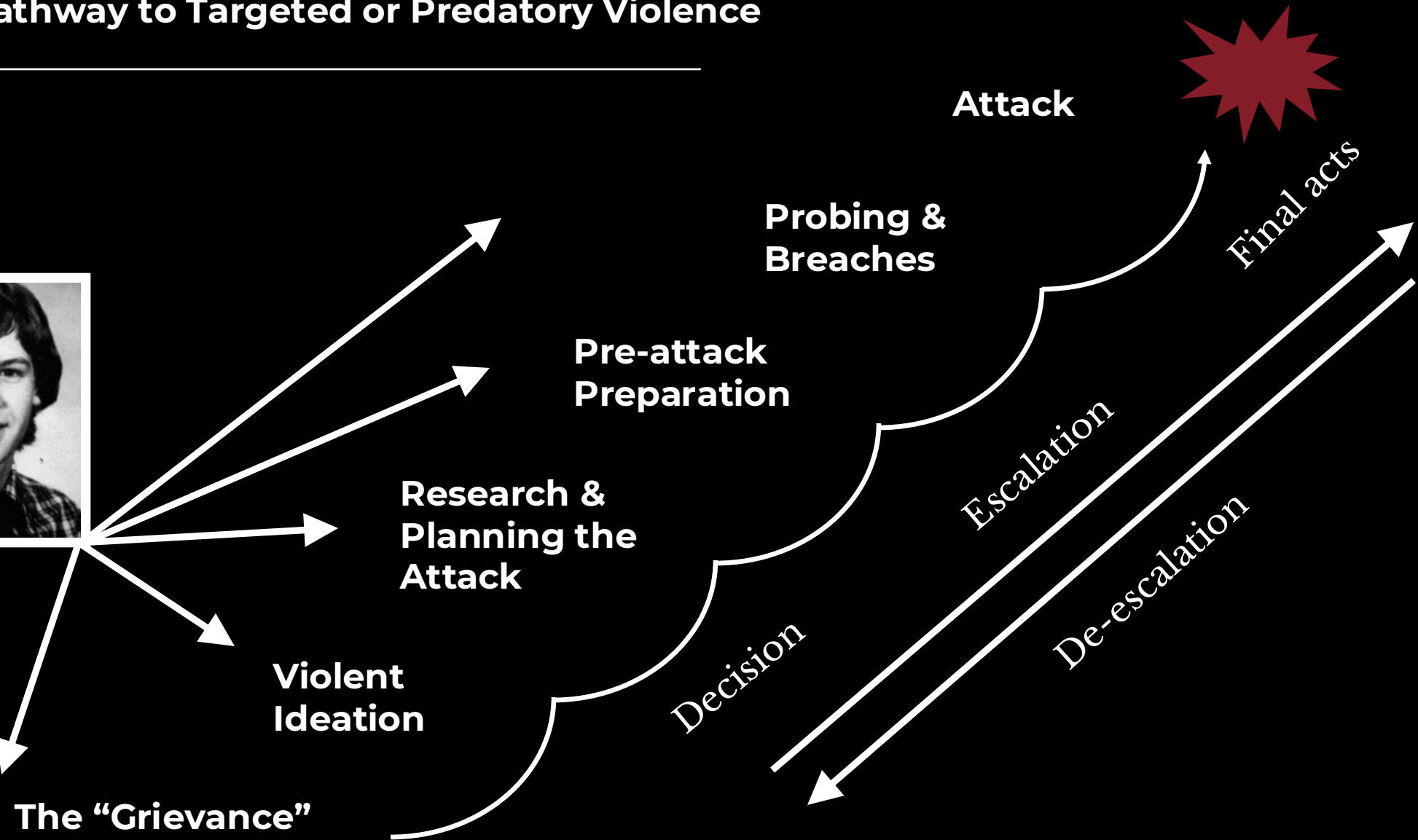
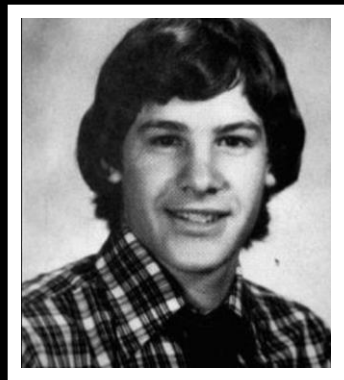
**INTENDED**

**AFFECTIVE**

# Targeted Violence is Progressive



# Pathway to Targeted or Predatory Violence



Adapted with permission from F.S. Calhoun and S.W. Weston (2003). *Contemporary threat management: A practical guide for identifying, assessing and managing individuals of violent intent.*  
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Harmful  
Intent



+

Means for  
the Attack



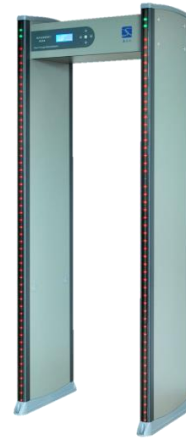
Prioritizing and relying solely on physical hardening.



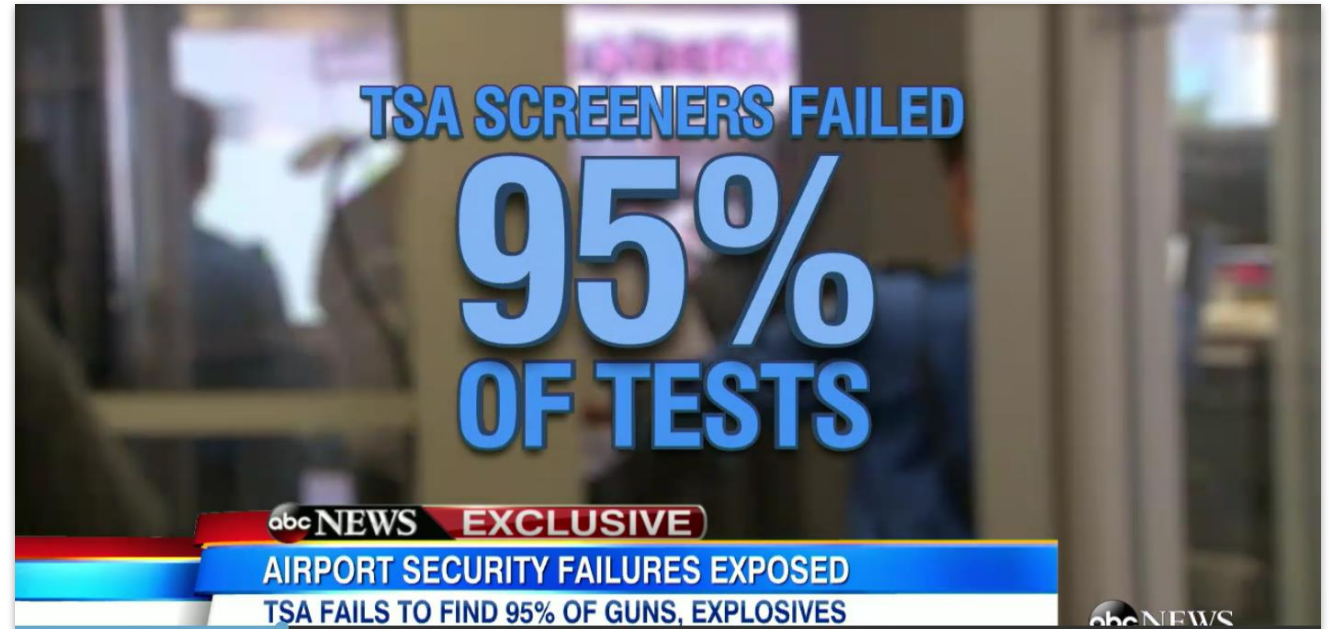
# Sandy Hook & Oklahoma City



Prioritizing and relying solely on weapon-centered security technology.



Results of  
weapon-  
centered  
technology  
prioritized as  
a solution



# Real proactiveness means: Consistent action to prevent the attack.



Security

Proactive Security (BTAM +BTD)= Security

# How is Malicious Intent identified?



**Legitimate  
Contextual  
Profile  
Abnormalities**



**Physiological  
Response to  
Detection  
Apprehension**



**Predictable  
Aggressors'  
Methods of  
Operation**

# Detecting Profile Abnormalities



**Belongings**



**Behavior**



**Identity**



**Story**



**Documents**



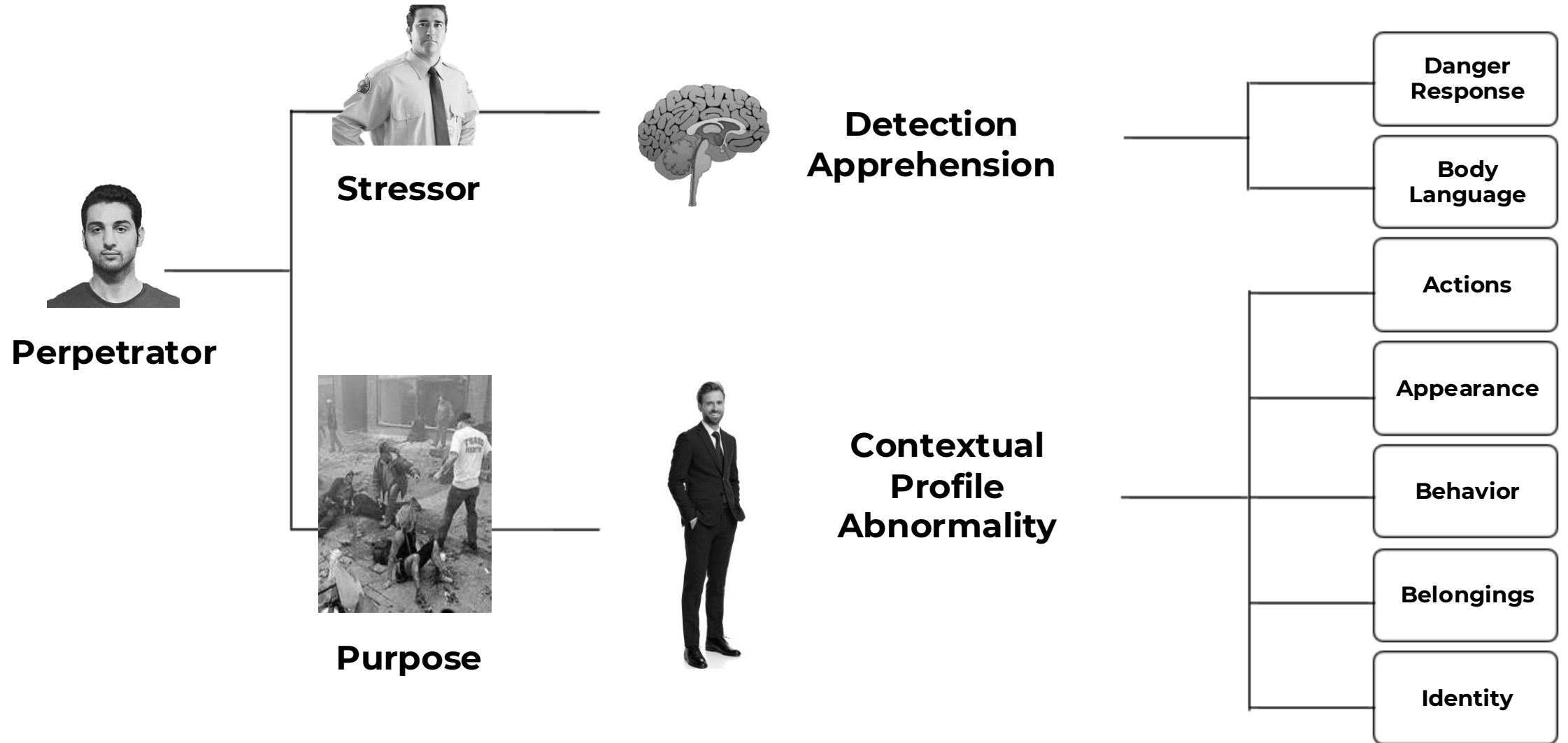
**Attire**

**ACTIONS**

# Scientifically validated methods in Behavior Threat Detection

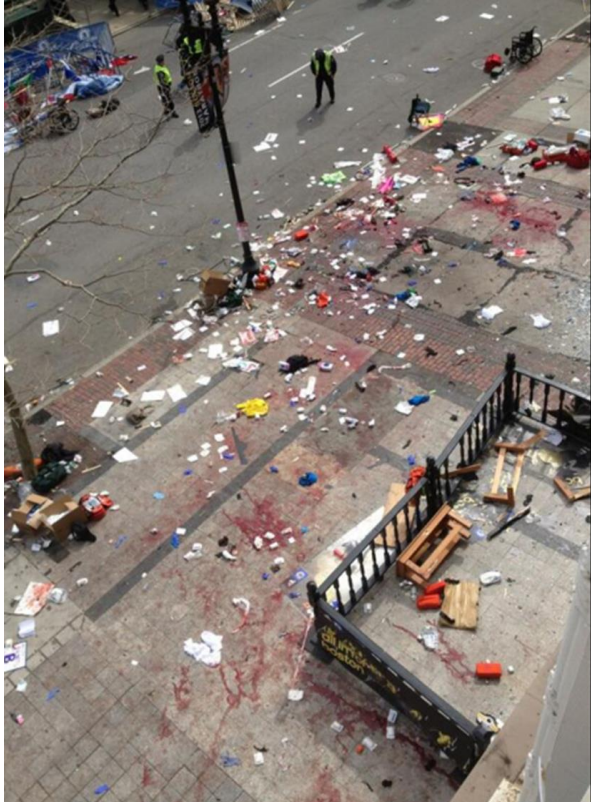
- ✓ American Psychological Association (2015).: Finding a Needle in a Haystack: Toward a Psychologically Informed Method for Aviation Security Screening
- ✓ Goleman, D. (1995). Emotional intelligence: Why it can matter more than IQ. Bantam Books.
- ✓ Kahneman, D. (2011). Thinking, fast and slow. Farrar, Straus and Giroux.
- ✓ MacLean, P. D. (1990). The triune brain in evolution: Role in paleocerebral functions.
- ✓ Department of Homeland Security (2015). Scientific Substantiation of Behavioral Indicators.

# Field Threat Detection





# Boston Marathon bombing victim Jeff Bauman on suspect Tamarlan Tsarnaev: 'He struck me as odd'



"Just that one guy, he didn't look like he was having a good time," Bauman said. "He was right next to me and he had a bag and he had his glasses and a leather sweatshirt and it was warm out, he was just an odd guy."

"He struck me as odd. That's what I remember of him. Next thing you know I hear fireworks and I'm on the ground. ... He was there, and then he was gone, and then boom."



Bombers did not fit the typical legitimate profile:

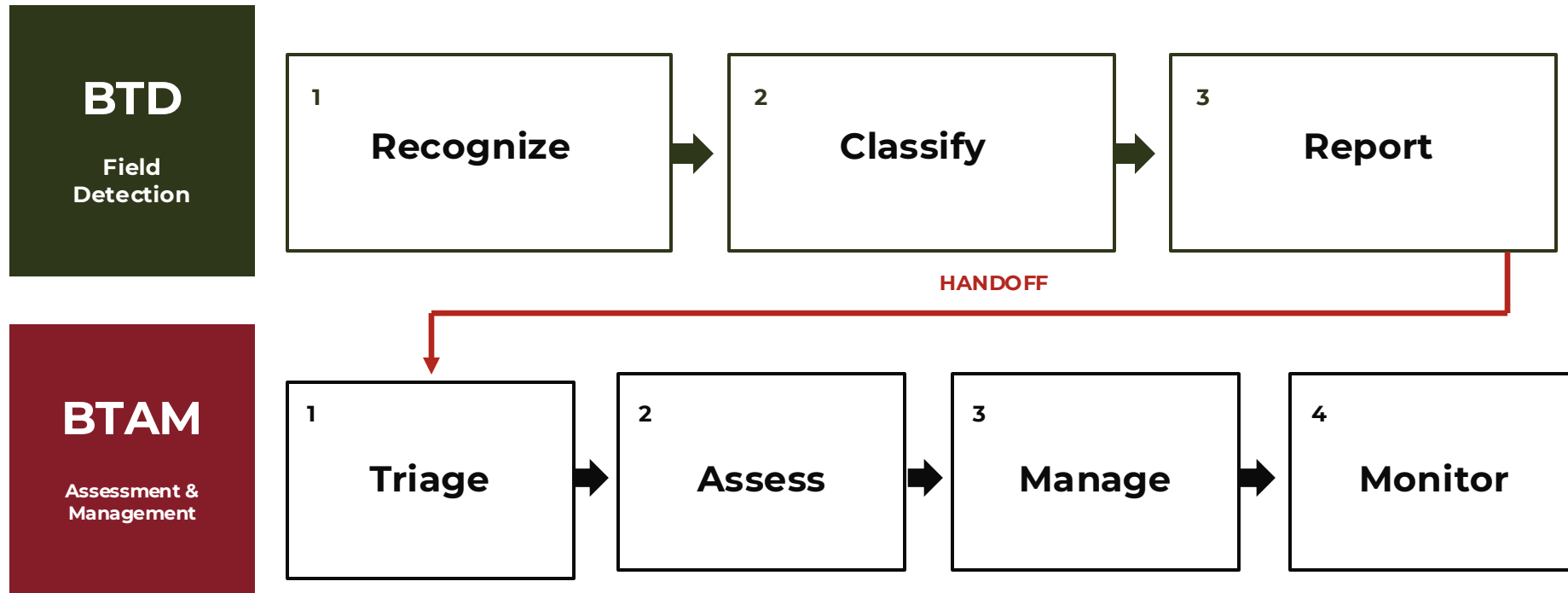
- Attire
- Behavior
- Belongings

Bag/Device Placement

# Operationalizing.

Behavioral Threat Detection in the field, plus Behavioral Threat Assessment & Management behind the scenes — as one program.

# BTD + BTAM: One Integrated Program



*Detection and assessment are not two programs. They are two halves of one program — linked by people, process, and platform.*

# The Role of a AI-Powered Surveillance System

## 1. Abnormalities Detection

- **Attire:** Detects changes in clothing or appearance that may signal an attempt to conceal identity.
- **Belongings:** Detects abnormal belongings and alerts security personnel

## 2. Automatic Behavior Detection

- **Behavior:** Pre-defined, environment-specific behaviors, pre-trained behavior.

## 3. Pattern recognition

- **Actions:** Identifies unusual movement, repetition, or loitering in sensitive areas.

# The Role of a Facial Intelligence

1. Recognition of **known individuals of concern**
2. Detection of unknown individuals of concern
3. Matches individuals to presented credentials or flags inconsistencies in usage history
4. **Public awareness of advanced technologies creates security deterrence**



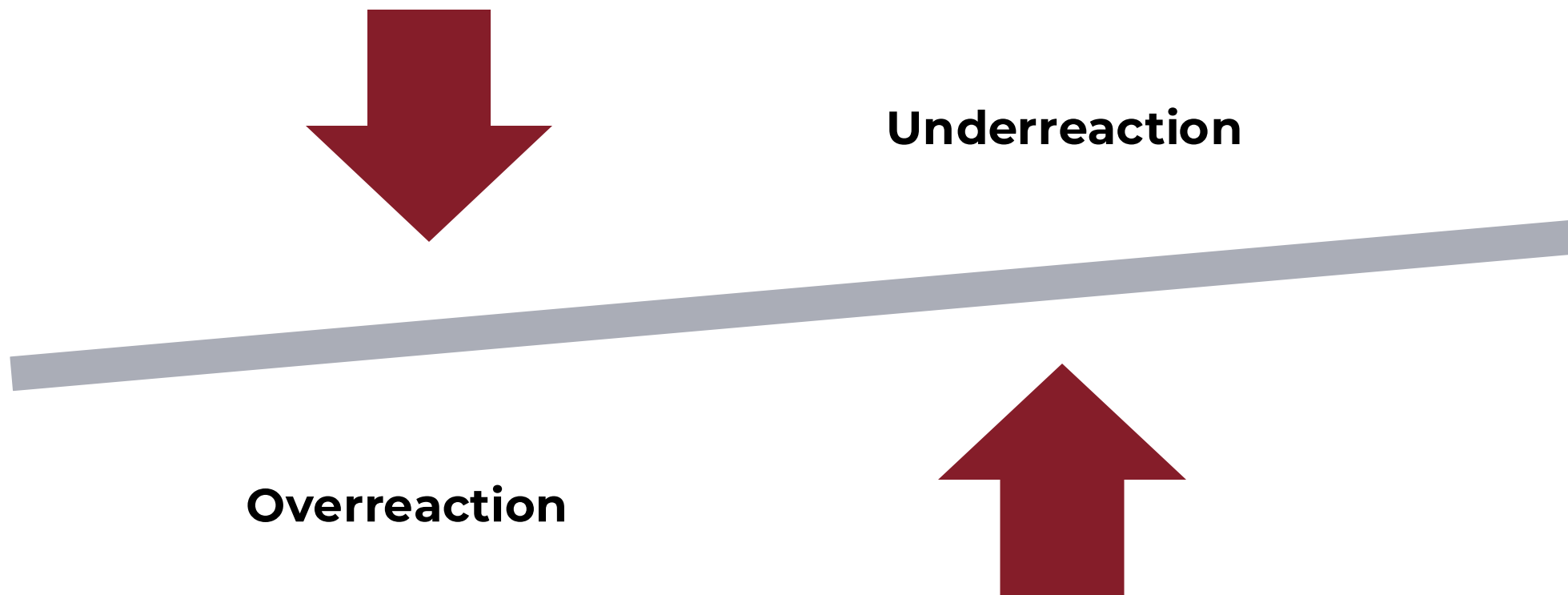
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# The Role of Weapon and Threat Detection Systems

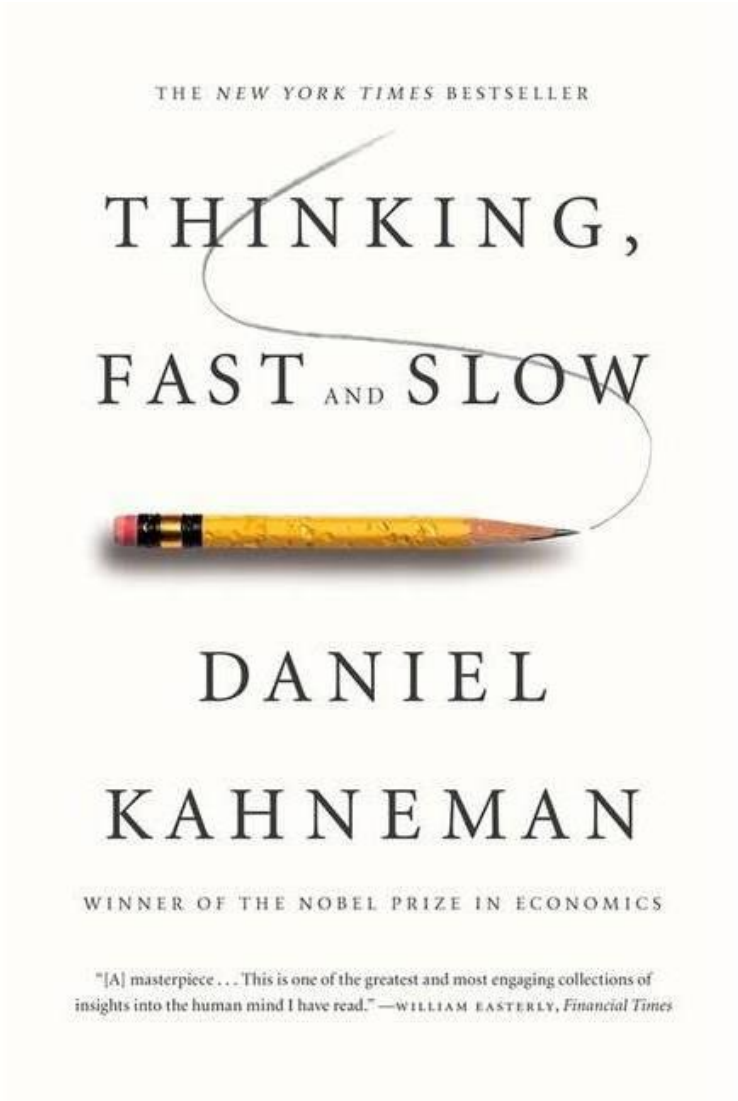
1. Trigger for a behavior threat detection and assessment
2. Stress stimuli/behavior elicitation
3. Supports a comprehensive security program.


# The Behavioral Threat Assessment Balance

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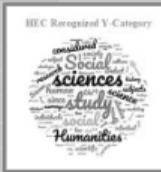
# Threat Assessment Cannot Be Unstructured





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## The Impact of Cognitive Biases on Decision-Making in High-Stakes Environments

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### ABSTRACT

This study investigates the impact of cognitive biases on decision-making in high-stakes environments, specifically confirmation bias, anchoring bias, and availability bias—on decision-making in high-stakes healthcare, finance, and emergency services. The study employs a quantitative design, examining decision accuracy and decision time across various scenarios. Results indicate that commonly reported biases, such as confirmation bias, anchoring bias, and availability bias, significantly impact decision accuracy and time. The study also explores how frequently professionals are aware of these biases and their awareness of mitigation strategies. Results indicate that structured decision-making frameworks and training programs can help professionals make more objective decisions and improve overall decision quality in critical environments.



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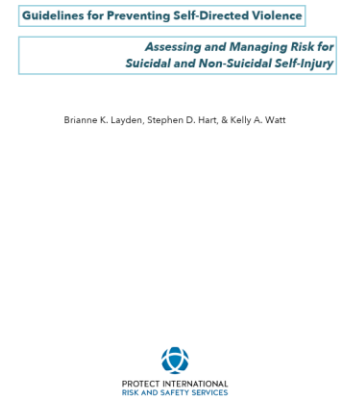
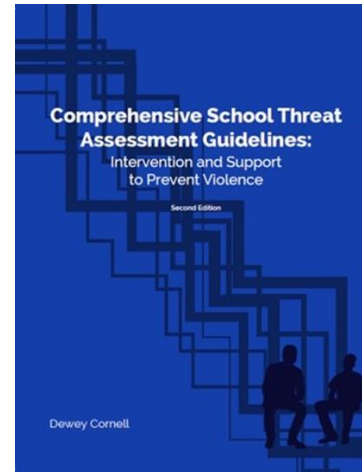
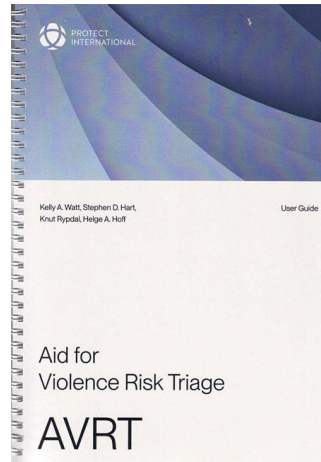
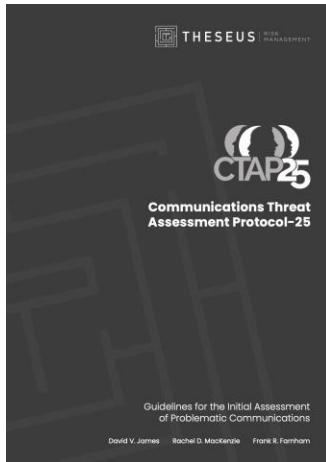
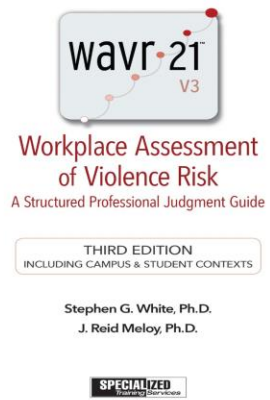
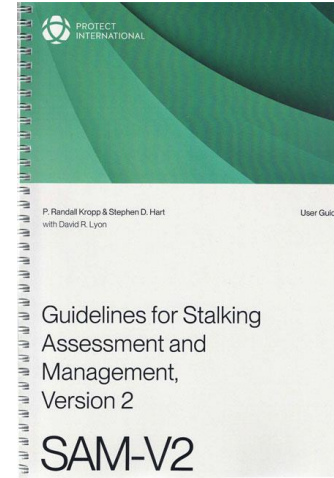
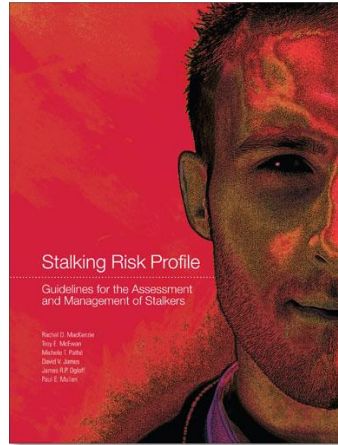
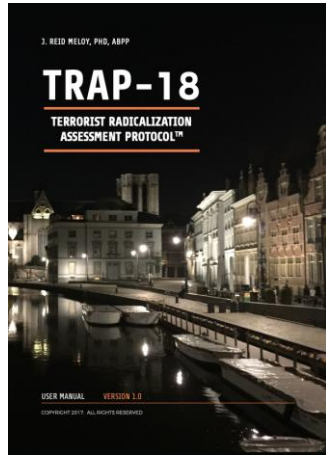
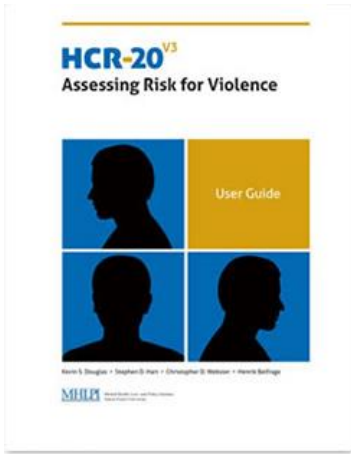
## The Impact of Cognitive Biases on Professionals' Decision-Making: A Review of Four Occupational Areas

Vincent Berthet<sup>1,2,\*</sup>

# Structured Professional Judgment Tools

- ✓ Structured tools for assessing risk of violence or other harmful behaviors
- ✓ Superior to individual subjective opinions of risk!
- ✓ Use evidence-based risk and protective factors
- ✓ No numerical scoring or algorithmic formula
- ✓ Factors generally coded present / not present with contextual documentation
- ✓ Use professional judgment to interpret gathered information
- ✓ Evaluate the relevance, severity, and trajectory of risk factors
- ✓ SPJs improve consistency, transparency, and defensibility
- ✓ Help mitigate cognitive bias
- ✓ Training and collaboration are essential
- ✓ Multiple SPJs may be used when helpful

# Common SPJ Instruments



# Essential Threat Assessment and Management Capability

1. Reporting mechanism
2. Timeline awareness
3. Early identification of escalation behaviors
4. Centralized access to all case and POC information
5. Seamless collaboration
6. Structured assessment
7. Documentation of intervention strategies and outcome
8. Ongoing management

# The Role of a Case Management Software

1. Facilitates multidisciplinary teamwork
2. Improves ability to identify escalation
3. Creates consistent and structured documentation
4. Strengthens defensibility and liability protection
5. Supports ongoing case evaluation

# TIPS®

## Structured Professional Case Management

wavr•21  
v3

AVRT

SARA-V3

Danger  
Assessment

CSTAG School Threat  
Assessment  
Consultants LLC

SAM-V2

Guidelines for  
Preventing Self-  
Directed Violence  
(SDV)



Columbia Suicide Severity  
Rating Scale (C-SSRS)

HCR-20<sup>V3</sup>



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