

Case Study: POC for National Civil Police C. America Country

1. Executive Summary

In November 2025, the National Civil Police of a Central American Country, conducted a large-scale Proof of Concept (PoC) to evaluate SensAI's ability to detect deception indicators in real time during pre-employment background interviews for police academy candidates and officers undergoing promotion.

Across 40 interrogations, SensAI demonstrated strong sensitivity in identifying deception-linked physiological patterns related to corruption, criminal concealment, illicit benefits, and undisclosed misconduct. The system provided actionable insights that significantly strengthen integrity screening and decision-making processes.

2. Background

The National Police face persistent challenges including organized crime infiltration, bribery, criminal concealment and internal corruption. Traditional interviews heavily rely on investigator intuition.

SensAI was evaluated as a scientific deception detection enhancement to modernize the police vetting process.

3. Objectives

- **Real-Time Deception Detection Validation**
 - Evaluate SensAI's ability to identify deception indicators.
 - Provide live deception analysis during interviews.
 - Guide interrogators toward relevant topics.
- **Deliver Decision-Ready Metrics**
 - - Provide objective deception indicators.
 - - Increase accuracy and reduce false assessments.
 - - Offer faster, more confident background evaluations.

4. Methodology

Phase 1 – Preparation

- Training of 16 interrogators
- Setup of SensAI interface and tagging procedures

Phase 2 – Execution

- 40 academy candidates interviewed across two days
- Average interview duration: 8 minutes

- SensAI displayed deception levels per topic in real time

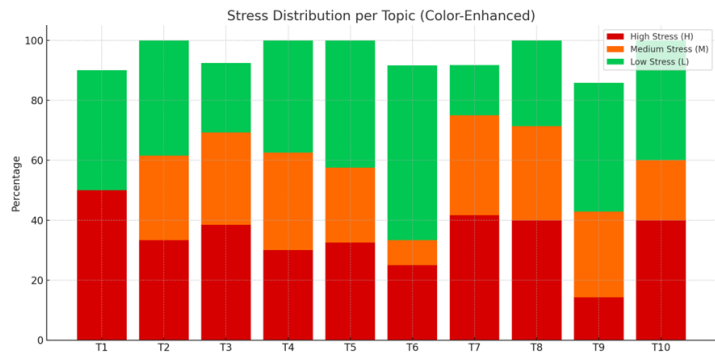
Phase 3 – Conclusion

Consolidated report with deception patterns and topic-level indicators

5. Interrogation Protocol

The protocol included 30 baseline questions and 90 relevant questions across 10 deception-risk domains:

1. Organized Crime
2. Drug Trafficking
3. Commission of Crimes
4. Illegal Drug Use
5. Selling Confidential Information
6. Illicit Benefits
7. Providing Sensitive Information
8. Stealing
9. Omitting Required Reports
10. Unauthorized Alcohol Use



C → R → C → R structure ensured optimal deception baseline comparison.

6. Key Results

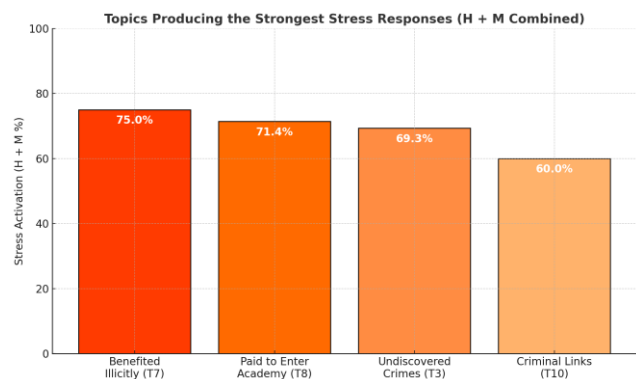
In addition to general observations of high- and low-reaction themes, a topic-level analysis revealed clear patterns in how candidates responded to specific thematic areas within the standardized questionnaire.

SensAI indicated that certain topics consistently elicited elevated physiological activation, while others produced calmer and less reactive patterns. These differences provide insight into which subject areas may be more personally salient or morally sensitive for aspiring police officers.

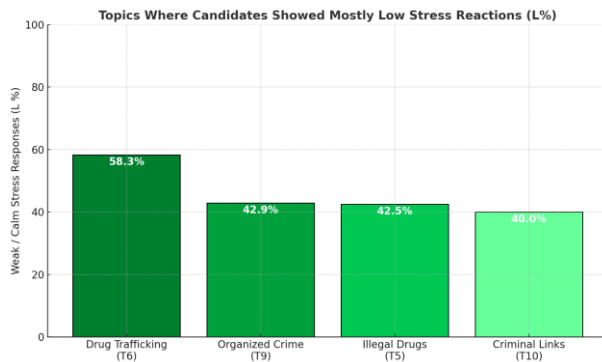
Top High-Deception Topics (High + Moderate Deception Indicators)

Results

Across interviews, topics involving fairness, corruption, hidden wrongdoing, or potentially damaging associations produced the strongest reactions with high probability for deceptions. These topics appear to be intrinsically sensitive and are therefore valuable focal points for follow-up questioning or deeper exploration during structured interviews



Topics with Low Deception Indicators:



Results

Low-reaction other topics produced little or no observable change in the stress index across most participants. Interrogators viewed these low reaction themes as less personally sensitive or less relevant to the candidates.

Interpretation:

Candidates showed stronger deception responses around corruption and hidden personal misconduct.

7. Operational Findings

SensAI provided:

- ✓ Rapid identification of deception patterns
- ✓ Clear differentiation between low-risk and high-risk candidates
- ✓ Decision support for academy admissions and promotions
- ✓ High acceptance by interrogators

8. Conclusion

The National Police PoC confirm SensAI as a powerful deception detection and integrity evaluation system.

It improves objectivity, speed, and accuracy of police decision-making and is ready for large-scale deployment within the National Police.