



FORENSIC INTERVIEWING VERSUS STATEMENT ANALYSIS: HOW WE ASK AND WHAT WE READ

¹Dr. Anjali Yadav,²Saumya Solanki

¹Assistant Director & Scientist 'C',²Forensic Professional

^{1,2}Central Forensic Science Laboratory (CFSL), DFSS, MHA, New Delhi, India

Abstract : Crime Investigations rely on human testimony as a primary source of evidence. That testimony becomes the pillar of the investigation. In Forensic Psychology, forensic interviewing and statement analysis address two linked but different questions. First, *how* to obtain a testimony which should be as accurate and uncontaminated as possible and second, *how* to evaluate the content of an obtained testimony for indicators of veracity or fabrication. Forensic interviewing and statement analysis play different but related roles in crime investigation. How that testimony is taken and how its content is interpreted have intense implications for the accuracy, fairness, and legal outcomes of the testimony and its findings.

Forensic interviewing. Forensic interviewing consists of the live, protocolized elicitation of witness and victim narratives intended to maximize accuracy and minimize contamination whereas **statement analysis** is the post hoc, content focused assessment of those narratives to identify linguistic and contextual markers associated with plausibility or fabrication. This article evaluates how interview fidelity affects analytic validity. Compares contrasts diagnostic performance and methodological requirements.

This article clarifies conceptual boundaries between forensic interviewing and statement analysis, their interdependence, and outlines practical and legal implications.

Keywords: *Forensic Psychology, Forensic interviewing, statement analysis, Criminal Investigation, Criminal Behaviour Analysis*

I. INTRODUCTION AND RATIONALE

Forensic interviewing is an evidence based set of practices used to obtain reliable, legally admissible information while minimizing harm to interviewees. The Interview types depend on the purpose, population and legal context. Choosing a correct interview approach gives a direction to the investigation, and reduces the risk of misleading or harmful outcomes of the investigation. Selecting the appropriate technique depends on the interviewee's vulnerability, the investigative goal, and legal safeguards (Lamb et al., 2007). Forensic psychology interviews are deliberate, scientifically informed conversations. Forensic interviews are used to collect, preserve, and evaluate human evidence in criminal investigations. Research over three decades shows that structured, open ended approaches elicit more accurate details and fewer false reports than unstructured or leading questioning (Memon, Meissner, & Fraser, 2010; Köhnken et al., 1999).

Forensic interviewing traces its roots to mid-20th-century. Theoretical work on statement validity to differentiate between genuine and fabricated accounts laid the groundwork for forensic interviewing. After statement validity, the content analysis methods and structured protocols emerged. Later the development of memory based interviewing and formalized child focused protocols made a shift from persuasion oriented interrogation toward evidence based information gathering practice. Modern forensic interviewing based on cognitive psychology. The **Cognitive Interview** improves eyewitness recall through context reinstatement and varied retrieval strategies, producing large effect sizes for correct recall while modestly increasing incorrect details (Memon et al., 2010).

Statement analysis techniques (SVA/CBCA, Reality Monitoring, SCAN) examine linguistic and content markers to assess plausibility and source characteristics of accounts. Meta analytic work indicates these methods can provide probabilistic cues but are **not** definitive indicators of truth. Their utility increases when combined with high quality interview data and corroborative evidence (Gancedo et al., 2021; Sporer, 2009). The analysis process involves evaluating various linguistic features and patterns, like, word selection, grammar usage, pronoun use, unnecessary information, avoidance, over explanation, speech, pauses, tenses, and inconsistencies throughout the story. The objective is to discover aspects that could indicate deception, fabrication, or a deliberate omission of information under investigation. Detecting subtle cues that are often unconsciously embedded in a person's narrative is the goal of forensic statement analysis. Forensic Statement Analysis has deep rooted tradition of using language as an indicator of deception, a practice that can be traced back to early days. Early awareness about the credibility of the statements and language used in statements, laid the groundwork for today's term "Forensic Statement Analysis".

In 1970, A German Psychologist, Udo Undeutsch proposed a Hypothesis called “Undeutsch Hypothesis”. As per this hypothesis, there will be a difference in the statement based on real experience of the event from the fabricated ones. A Swedish Psychologist, Arne Trankell, carried forward the Undeutsch Hypothesis and developed “Reality Analysis” method to evaluate the credibility of the statements given by witnesses. In 1980, Researchers and investigators started recognizing advances in cognitive psychology and linguistics pattern. They started to propose methods for evaluating testimony based on specific linguistic markers.

II. THEORETICAL FOUNDATIONS AND CORE CONSTRUCTS

Forensic interviewing Forensic interviewing protocols derive from cognitive theories of memory and developmental psychology. Protocols such as the NICHD Investigative Interview Protocol emphasize rapport building, open ended invitations to free narrative and phased non-leading probs to reduce suggestibility and increase accurate detail especially in child witnesses (Lamb et al., 2007). The Cognitive Interview and its enhanced variants apply retrieval principles like context reinstatement, varied retrieval cues, and multiple retrieval attempts to improve adult eyewitness recall (Memon et al., 2010). The central theoretical claim is that elicitation method causally affects the quantity and quality of recalled information.

Statement analysis Statement analysis encompasses methods that code linguistic and content features of a recorded statement to provide probabilistic cues about veracity. Prominent approaches include Criteria Based Content Analysis (CBCA) within the Statement Validity Assessment (SVA) framework, Reality Monitoring (RM), and other linguistic analyses (Steller & Köhnken, 1989; Johnson & Raye, 1981). CBCA posits that truthful accounts contain more contextual embedding, sensory and perceptual detail, and spontaneous corrections. RM distinguishes memories of perception from imagination by the presence of sensory, temporal, and contextual information (Johnson & Raye, 1981). These methods are grounded in cognitive models of memory encoding and language production and are explicitly probabilistic rather than determinative.

III. INTERDEPENDENCE

Forensic interview protocols focus rapport, open-ended questions, and phased questioning to maximize accurate recall and minimize contamination (La Rooy et al., 2015). **Statement analysis** grounded on that experienced based accounts differ systematically from fabricated accounts in content, structure, and linguistic markers.

Forensic interviewing and statement analysis are mutually dependent because each process both **conditions** and **derives value from** the other. Evidence based interview protocols maximize free recall, temporally anchored, and sensory rich narratives by minimizing contamination and interviewer bias. It results in obtaining the high quality input that requires to discriminate between experienced and fabricated accounts (La Rooy et al., 2015).

Statement analysis grounded in the Undeutsch hypothesis through content based methods and linguistic markers, extracts veracity, relevant signals (e.g., temporal specificity, contextual embedding, plausibility patterns) and highlights **precise gaps or inconsistencies** that can be addressed through targeted, non leading re questioning, improving completeness without introducing suggestibility (Undeutsch, 1954; Vrij, 2008).

This interdependence creates **mutual safeguards**. Protocolized interviewing reduces the likelihood that analysts will misinterpret artifacts of poor elicitation such as interviewer introduced details or memory contamination as indicators of deception. At the same time, validated analytic procedures with **interrater reliability** protect interviewers from over interpreting normal memory variability as dishonesty, because coding standards and reliability checks distinguish systematic markers from random omissions (Undeutsch, 1954; Vrij, 2008).

Statement analysis depends on the quality of narration. Narrative conventions, language structure, and cultural storytelling norms affect both narration and content markers. Criteria developed in one language or cultural context may not transfer without adaptation and validation. Translation can change sensory and temporal markers, and cultural norms may influence the presence or absence of CBCA indicators (Sporer, 2004). Expert must therefore **translate, back translate, and pilot** both interview prompts and analytic criteria before routine use in multilingual settings.

IV. CORE DIFFERENCES BETWEEN FORENSIC INTERVIEW AND STATEMENT ANALYSIS (CONCEPTUAL AND PROCEDURAL)

Primary aim in Forensic interview is to elicit accurate, minimally contaminated accounts using structured protocols. It **focuses** on process and rapport to maximize free narrative recall. Whereas **Statement analysis** evaluate transcripts/recordings for content markers to assess plausibility or indicators of fabrication. It **focuses** on content features and linguistic patterns.

Timing and data flow: Interviewing occurs **live** during investigation whereas statement analysis occurs **after** the interview on preserved records.

Training and fidelity: Interviewers require **protocol training and fidelity monitoring** whereas stamen analysis expert require coder training and inter rater reliability checks. Both roles demand documentation for admissibility.

Dimension	Forensic interviewing	Statement analysis
When	During investigation (live)	Post interview (transcript/recording)
What it controls	Questioning style, timing, rapport	Content markers, linguistic features
Primary protocols	NICHHD; Cognitive Interview	CBCA/SVA; Reality Monitoring; SCAN
Evidence role	Produces primary testimonial evidence	Corroborative/probabilistic indicator
Legal risk if poor	Contaminated testimony; false reports	Misleading inferences from contaminated data
Training need	Interviewer training and fidelity monitoring	Coder training; inter rater reliability
Forensic value	Produces higher quality evidence and reduces suggestibility.	Provides probabilistic cues; best used as corroboration, not proof.

V. CONCLUSION

Forensic interview and statement analysis are complementary pillars in crime investigation. Interview guides **how** we take the narration shapes the quality and reliability of the testimony and **what** we read from that testimony decides the direction of subsequent inquiry. **Integrating both interviewing and statement analysis together results in higher quality evidence for better investigative directions and stronger courtroom presentation.**

REFERENCES

- [1] Gancedo, Y., Fariña, F., Seijo, D., Vilariño, M., & Arce, R. (2021). Reality monitoring: A meta-analytical review for forensic practice. *Revista de Psicología*, 13(2), 99–110.
- [2] Johnson, M. K., & Raye, C. L. (1981). Reality monitoring. *Psychological Review*, 88(1), 67–85.
- [3] Köhnken, G., Milne, R., Memon, A., & Bull, R. (1999). The cognitive interview: A meta-analysis. *Psychology, Crime & Law*, 6(1–2), 1–20.
- [4] La Rooy, D., Brubacher, S. P., Aromäki-Stratos, A., Cyr, M., Hershkowitz, I., Korkman, J., Myklebust, T., Naka, M., Peixoto, C. E., Roberts, K. P., Stewart, H., & Lamb, M. E. (2015).
- [5] Lamb, M. E., Orbach, Y., Hershkowitz, I., Esplin, P. W., & Horowitz, D. (2007). Structured forensic interview protocols improve the quality and informativeness of investigative interviews with children: A review of research using the NICHHD Investigative Interview Protocol. *Child Abuse & Neglect*, 31(11–12), 1201–1231.
- [6] Memon, A., Meissner, C. A., & Fraser, J. (2010). The cognitive interview: A meta-analytic review and study space analysis of the past 25 years. *Psychology, Public Policy, and Law*, 16(4), 340–372.
- [7] Oberlader, V. A., et al. (2016). Validity of content-based techniques to distinguish true and fabricated statements: A meta-analysis. *Law and Human Behavior*, 40(4), 440–456.
- [8] Sporer, S. L. (2004). The relative diagnostic value of verbal and nonverbal cues to deception. *Applied Cognitive Psychology*, 18(9), 1193–1210.
- [9] Steller, M., & Köhnken, G. (1989). Criteria-based content analysis. In D. C. Raskin (Ed.), *Psychological methods in criminal investigation and evidence* (pp. 217–245). Springer.
- [10] Vrij, A. (2008). *Detecting lies and deceit: Pitfalls and opportunities* (2nd ed.). Wiley.
- [11] Vrij, A. (2015). Verbal lie detection tools: Statement Validity Analysis, Reality Monitoring and Scientific Content Analysis. In P. A. Granhag, A. Vrij, & B. Verschuere (Eds.), *Detecting deception: Current challenges and cognitive approaches* (pp. 3–35). Wiley.
- [12] Undeutsch, U. (1954). The reality of statements and the credibility of testimony [Undeutsch hypothesis]. (Original work published in German).